Beta 2.05 - Do Not Post or Release

Torq® User Guide

Version 2.0

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Documentation Feedback

We are always looking for ways to improve our documentation. If you have comments, corrections, or suggestions regarding our documentation, email us at ***techpubs@avid.com***.

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Chapter 1: Introduction to Torq 2.0

Welcome

Congratulations on your purchase of Torq®. Torq software combines traditional DJ tools with features normally found in advanced audio production applications, such as sampling and VST effects to mix your music on Mac OS X and Windows platforms.

To help you achieve the best results, this user guide explains how to setup and configure Torq as well as how to use the extensive features found within the application.

Torq 2.0 Features

- Support for Torq Xponent® and qualified third party hardware
- Four Decks
- Optional Two Deck Mode
- Deck Switch for controlling four decks with qualified two-deck hardware
- MIDI Platter Control for resuming playback of paused songs in perfect sync
- Traq Morph offering four new Crossfader algorithms
- Built in effects and signal processors
- Support for third party VST plug-ins
- 18 individual samplers for looping and loading samples onto any of the four decks
- Support for up to four external control surfaces
- MIDI control assignment MIDI Learn

⚠ *Each qualified hardware product works with Torq in a different manner. Refer to the documentation provided with your controller for manufacturer specific information.*

Refer to www.avid.com/torqFAQ for a current list of qualified hardware, the latest news and updates.

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System Requirements

Avid® can only assure compatibility and provide support for hardware and software it has tested and approved.

For complete system requirements and a list of qualified third-party hardware, visit www.avid.com/torqFAQ.

Product Registration

Please register your product online at www.avid.com/support. By doing so, you become eligible to receive the following:

- Technical support information
- Software update and upgrade notices
- Hardware warranty information

Conventions Used in This Guide

The following symbols are used to highlight important information:

User Tips are helpful hints for getting the most from your system.

Important Notices include information that could affect your data or the performance of your system.

Cross References point to related sections in this guide.

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Chapter 2: Software Installation

Installation

The following directions are for installing the Torq software onto your computer. Please follow the installation instructions provided with your hardware device before launching Torq.

Windows 7, Vista, and Windows XP

To install Torq on a Windows computer:

1 Place the Torq disc in your CD/DVD drive.

2 Windows will automatically launch the install screen. (If you are using Windows Vista or XP, and see an Autoplay dialog window, click "Run autorun.exe" to launch the installer.)

If the install screen fails to launch, you can manually start it by clicking on Start > Computer > Torq Disk. If you are using Windows XP, "Computer" will be labeled "My Computer" in this step.

If you have purchased Torq as a download, locate the installer and launch it by double clicking the icon.

3 Click "Install" and follow the on-screen instructions

4 When Torq is finished installing, choose "Finish."

5 Close the installer screen.

6 Install and connect your qualified hardware. Refer to the documentation provided with your devices.

7 Double-click the Torq application icon to launch the program.

Macintosh OS X

To install Torq on a Mac:

1 Place the Torq disc in your CD/DVD drive.

2 Double-click the Torq CD icon on your desktop. This will display the contents of the CD.

3 Double-click the installer icon.

If you have purchased Torq as a download, locate the installer and launch it by double clicking the icon.

4 Follow the on-screen instructions.

5 When installation has completed, select "Close."

6 A Torq icon will be placed in the Dock.

7 Install and connect your qualified hardware. Refer to the documentation provided with your devices.

8 Click the icon to launch the program.

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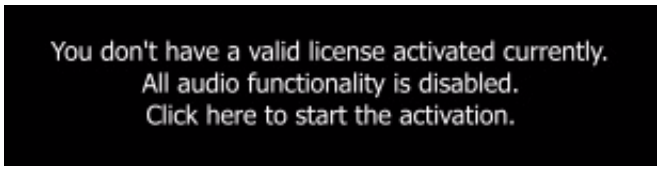
Activation

Once you have completed the software installation, Torq must be activated and authorized using the Avid Activation Tool. This tool can also be used to activate Torq to run as a 30 day trial version.

⚠ *The 30 day trial period cannot be extended. Torq must be activated and authorized using the Avid Activation Tool if you wish to continue using the application at the end of the trial period. If you deactivate Torq during the 30 day trial period, the application will still launch for the remainder trial. However, as the trial cannot be extended you will need to complete the activation and authorization process*


You don't have a valid license activated currently.
All audio functionality is disabled.
Click here to start the activation.

Activation Message

Upon launching Torq, the message "You don't have a valid license activated currently. All audio functionality is disabled. Click here to start the activation" will appear in the mixer section; Click this section to start the activation process.

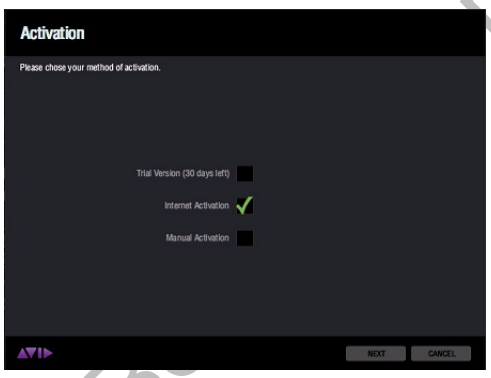
There are two methods of activating Torq as described below:

Automatic Activation

This option lets you register Torq over the Internet.

To activate Torq automatically:

1 Choose Internet Activation and click "Next.".



Internet Activation

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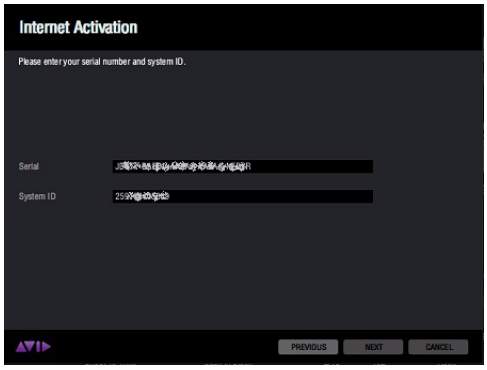
2 . Enter your serial number and System ID in the respective text boxes. Your serial number and system identification number are located inside the enclosed Torq 2.0 Quick Setup Guide. If you purchased Torq online, you received your serial number and system identification number from Avid by e-mail. You can also view your serial number and system identification number by logging in to your support account.

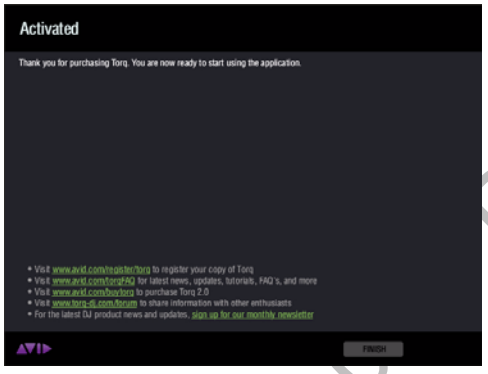


Serial Number and System ID Entered

⚠ *Torq 2.0 serial numbers start with the letter "J" and contain only CAPITAL letters. System ID numbers contain only numbers, no letters. If copying and pasting these to Torq, make sure there are no spaces at the beginning or end.*

3 Click "Next" and Torq will connect to the Internet and activate automatically.

4 When you see the Activated screen, your copy of Torq is activated and ready to use. Click "Finish."



Activated Screen

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Manual Activation

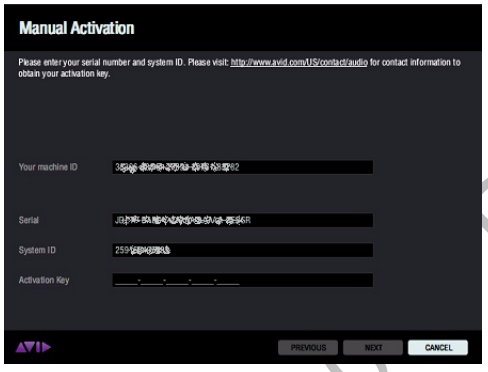
This option lets you activate Torq without an Internet connection.

To activate Torq manually:

1 Choose Manual Activation and click “Next.”

Manual Activation

2 Enter your serial number and System ID in the respective text boxes. Your serial number and system identification number are located inside the enclosed Torq 2.0 Quick Setup Guide. If you purchased Torq online, you received your serial number and system identification number from Avid by e-mail. You can also view your serial number and system identification number by logging in to your support account.



Serial Number an System ID Entered

⚠ *Torq 2.0 serial numbers start with the letter “J” and contain only CAPITAL letters. System ID numbers contain only numbers, no letters. If copying and pasting these to Torq, make sure there are no spaces at the beginning or end.*

3 Retrieve and Enter an Activation Key. You can retrieve an Activation Key using another computer's Internet connection, or by contacting Avid Customer Support. To retrieve an Activation Key you will need your Serial Number, System ID, and Your machine ID.

To retrieve an Activation Key:

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- To activate using another computer's Internet connection, go to http://activate.avid.com and enter your Torq 2 Serial Number, System ID, and Your machine ID, and then click “Activate”

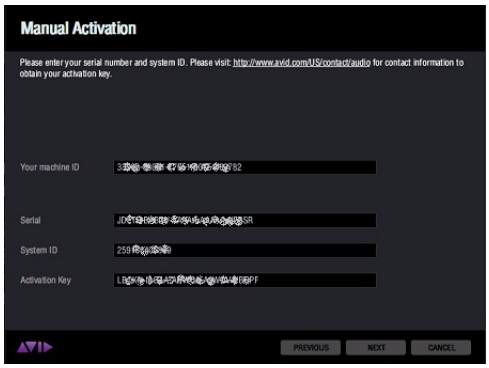
– or –

- Go to http://www.avid.com/US/support/support-contact#maudio and provide your Torq 2 Serial Number, System ID, and Your machine ID and a support rep will be able to issue an Activation Key

⚠ *Be sure to select your country or region from the dropdown if you are outside of the US. Activation Keys can be provided by phone or online support.*

4 Enter the Activation Key in the last line of the Manual Activation window. You can type it in, or copy the entire Activation Key from a text file and paste it into the first text box and it automatically fills the rest of the text boxes.

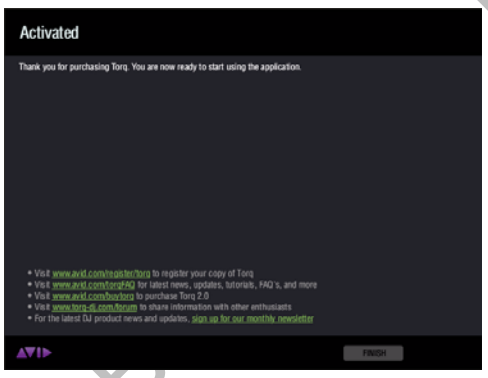
⚠ *Torq 2.0 Activation Keys start with the letter “L” and contain only CAPITAL letters.*



Manual Activation Key Entered

5 Click “Next.”

6 When you see the Activated screen, your copy of Torq is activated and ready to use. Click “Finish.”



Activated Screen

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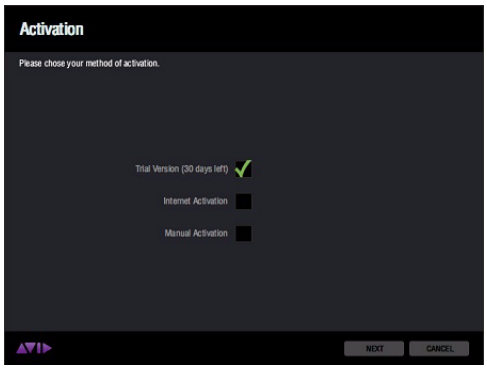
30-day Trial Activation

If you would like to demo Torq before purchasing, you can activate a 30 day trial version of Torq. The 30 day trial period cannot be extended, and Torq must be activated and authorized if you wish to continue using the application. If you deactivate Torq during the 30 day trial period, the application will still launch for the remainder trial. However, as the trial cannot be extended you will need to complete the activation and authorization process.

To activate Torq for the 30-day trial period:

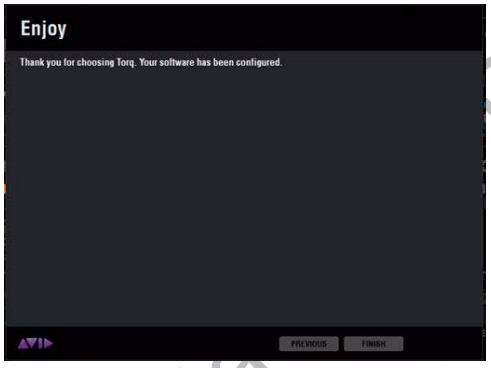
1 Choose Trial Version and click "Next."



Trial Activation

⚠ *An Internet Connection is NOT required for Trial Activation.*

2 When you see the "Activated" screen, your 30 day trial of Torq is activate and ready to use. Click "Finish."



Activated Screen

At any time during the 30-day trial period, you can choose to purchase a copy of Torq and use the Activation tool to activate it by clicking the Licensing button in Torq. If you choose not to purchase the software, Torq will deactivate when the trial expires.

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Deactivating Torq

If you want to run Torq on another system, you first must deactivate your software license before you can activate it on a second system. Deactivation occurs while Torq is running, but the deactivation process automatically saves all open bins and the current project.

⚠ *You must be connected to the Internet to deactivate your software.*

To deactivate Torq:

1 While the program is running, click on the Preferences icon in the Tool Bar at the top of the Torq interface.

Torq Preferences Icon

2 Click the Licensing button in the lower left of the Torq Preferences screen.

Torq Preferences

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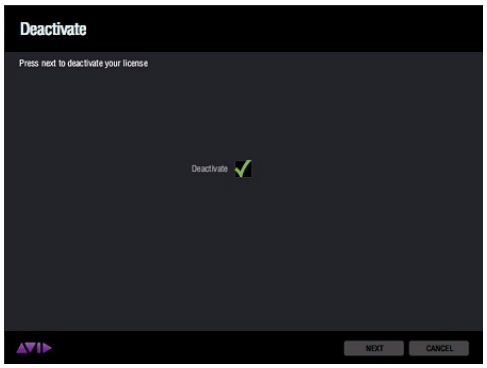
3 When the Deactivate screen appears, click “Next” to complete the deactivation process.



Deactivate Screen

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Chapter 3: Torq 2.0 Configuration

Setup Assistant

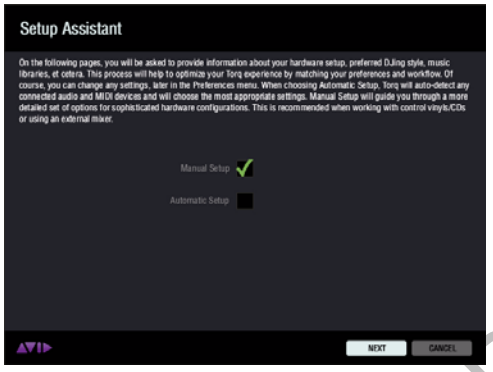
Once you have completed the installation and activation process, the Torq Setup Assistant will launch, allowing you optimize the of the program to work on your system with qualified hardware. The Setup Assistant lets you use two methods of configuring Torq.

Manual Setup

This method guides you through a detailed set of options for more sophisticated hardware configurations.

To Manually Setup Torq:

1 Choose Manual Setup, then click "Next."


Setup Assistant
On the following pages, you will be asked to provide information about your hardware setup, preferred DJing style, music libraries, et cetera. This process will help to optimize your Torq experience by matching your preferences and workflow. Of course, you can change any settings, later in the Preferences menu. When choosing Automatic Setup, Torq will auto-detect any connected audio and MIDI devices and will choose the most appropriate settings. Manual Setup will guide you through a more detailed set of options for sophisticated hardware configurations. This is recommended when working with control vinyls/CDs or using an external mixer.
Manual Setup
Automatic Setup
NEXT
CANCEL

Setup Assistant - Manual Setup

2 Click the pop-up menu on the Audio Device Setup screen and choose the audio device you wish to use from the list of available options, then click "Next".

Setup Assistant - Audio Device Setup

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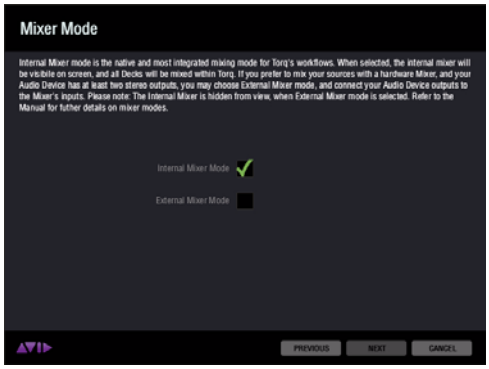
3 When the Mixer Mode screen appears, choose one of the two Mixer modes. If you are going to use an external hardware mixer with Torq, proceed to step 11 under "External Mixer Mode" on page 15, otherwise proceed to step 4.

Internal Mixer Mode


Mixer Mode
Internal Mixer mode is the native and most integrated mixing mode for Torq's workflows. When selected, the internal mixer will be visible on screen, and all Decks will be mixed within Torq. If you prefer to mix your sources with a hardware Mixer, and your Audio Device has at least two stereo outputs, you may choose External Mixer mode, and connect your Audio Device outputs to the Mixer's inputs. Please note: The Internal Mixer is hidden from view, when External Mixer mode is selected. Refer to the Manual for futher details on mixer modes.
Internal Mixer Mode
External Mixer Mode
PREVIOUS
NEXT
CANCEL

Setup Assistant - Internal Mixer Mode

Choosing Internal Mixer Mode lets you mix all of the Decks within Torq using a hardware controller, such as Torq Xponent, any other qualified third-party controller, or your mouse. While Torq is set to Internal Mixer Mode, the internal mixer will be visible on-screen, and all hardware controller movements will be reflected in the application.

4 Select Internal Mixer Mode, then click "Next."

Deck Mode

By default Torq 2.0 is set to run in Four Deck Mode which provides four Decks in the Torq interface. However you also have the option of using the program in the more traditional Two Deck Mode, with two on-screen Deck.

Refer to "Four Deck Mode vs. Two Deck Mode" on page 30 for more information.

Deck Mode
Torq can support 2 or 4 Decks, each deck allowing full playback control, simultaneously. Each song is played on a Deck shown in the Graphical User Interface (GUI). It is common for DJs to use only 2 Decks for mixing from one song to the next. DJs and performers seeking complex mixing and layering capabilities may prefer 4 Decks to gain simultaneous control over more sources. Xponent and other 2 Deck Controllers can be adapted to 4 Deck control using Torq intuitive keyboard commands. Please select the number of Decks you'like to see and use in Torq, below. Note: This setting can be switched at any time from the toolbar in Torq.
Two Decks
Four Decks
PREVIOUS
NEXT
CANCEL

Setup Assistant - Deck Mode

5 Choose the Deck Mode you wish to use, then click "Next."

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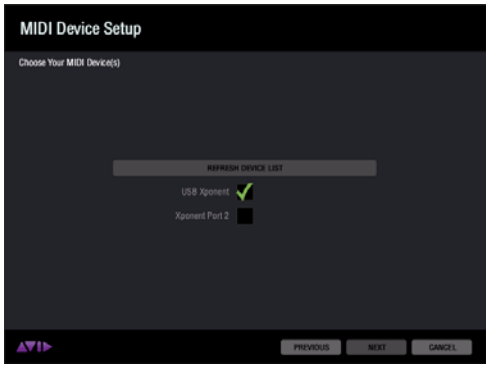
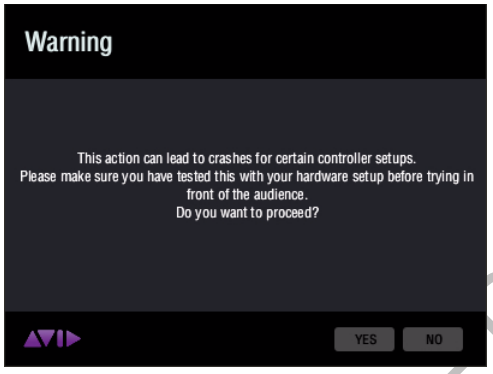
6 When the MIDI Device Setup screen appears, choose a MIDI device from the available options, then click "Next."



Setup Assistant - MIDI Device Setup

If Your MIDI Device is Not Listed

If you do not see a listing for the MIDI device you want to use, click the "Refresh Device List" button. A Warning screen will appear asking you to confirm that you want Torq to scan for the missing MIDI Device. Read the screen very carefully, then click "Yes" if you still want to refresh the device list. Once the process has completed, and your device appears, click "Next."


Warning
This action can lead to crashes for certain controller setups.
Please make sure you have tested this with your hardware setup before trying in front of the audience.
Do you want to proceed?
YES
NO

Setup Assistant - Refresh Device List Warning

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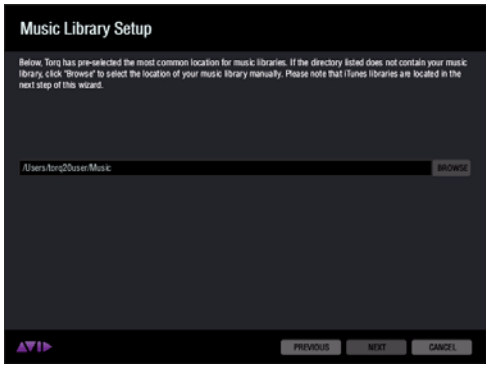
7 Torq preselects the most common location for your music folder based on your operating system. If the folder path displayed on the Music Library Setup screen is correct, click "Next."

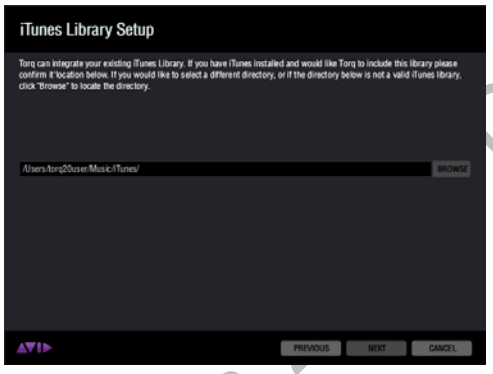
If the preselected location is incorrect, click the Browse button to the left of the folder path and navigate to the proper location on your system. Once you have found the folder, click on it once, then click "Open" (Mac) or "OK" (Windows). When that window closes, click "Next" on the Music Library Setup screen.


Music Library Setup
Below, Torq has pre-selected the most common location for music libraries. If the directory listed does not contain your music library, click "Browse" to select the location of your music library manually. Please note that iTunes libraries are located in the next step of this wizard.
/Users/torq20user/Music
BROWSE
PREVIOUS
NEXT
CANCEL

Setup Assistant - Music Library Setup

8 If you have iTunes installed on your computer, Torq will preselect the default location of your iTunes library based on your operating system. If the folder path displayed on the iTunes Library Setup screen is correct, click "Next."

If the preselected location is incorrect, click the Browse button to the left of the folder path and navigate to the proper location on your system. Once you have found the folder, click on it once, then click "Open" (Mac) or "OK" (Windows). When that window closes, click "Next" on the iTunes Library Setup screen.


iTunes Library Setup
Torq can integrate your existing iTunes Library. If you have iTunes installed and would like Torq to include this library please confirm it's location below. If you would like to select a different directory, or if the directory below is not a valid iTunes library, click "Browse" to locate the directory.
/Users/torq20user/Music/iTunes/
BROWSE
PREVIOUS
NEXT
CANCEL

Setup Assistant - iTunes Library Setup

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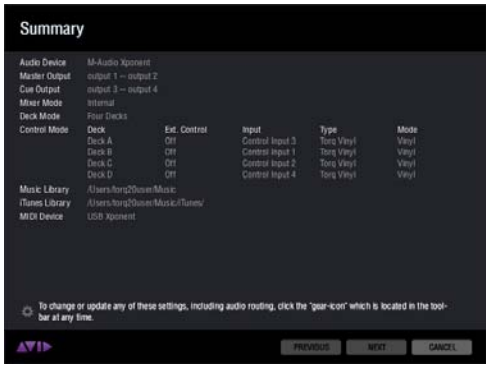
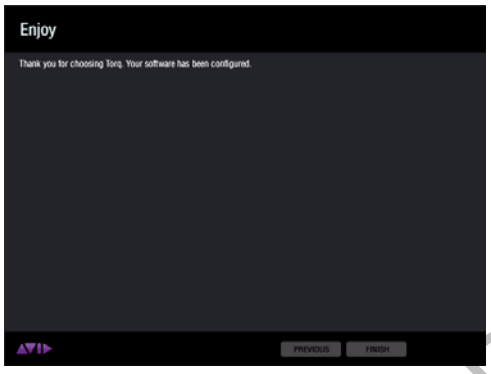
9 Review the information displayed on the Summary screen, then click "Next" if all the information listed is correct.

If any of the information is incorrect, click "Previous" to go back to the appropriate page, or click the "Gear" icon to open the Torq Preferences (see "Torq Preferences" on page 101) to change the settings.



Setup Assistant - Summary

10 Click Finish on the Enjoy screen.



Setup Assistant - Enjoy

External Mixer Mode

Choosing External Mixer Mode lets you mix you songs with a hardware mixer and an audio device with at least two stereo outputs. However the on-screen mixer will be hidden.

For more information about External Mixer Mode Preferences, refer to "External" on page 109 and "External Mixer Mode Channel Assignments" on page 110.

11

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Chapter 4: Accessing Your Music

This chapter covers locating and organizing your music using the Browser and Database, as well as creating Playlists which let you quickly access and load songs onto any of the four Decks during your performances.

The Browser

?Question¿ screen shot of Browser here.

The Browser is located in the lower section of the Torq interface. The first column on the left of the Browser is the Index, which is used for navigating your system when locating and loading songs onto the decks.

The Index contains folder headings for Snapshots, Database, and Files. The Files category contains all internal and connected external hard drives (such as "C:" or "Macintosh HD") and CD's in your computers optical drive. The other standard headings are for your local Music folder ("Music" on Mac and "My Music" in Windows), the Desktop, iTunes, Crates, Playlists and any connected media players such as an iPod.

Clicking any of the headings will display its contents in the File List on the right side of the Browsers. Clicking the plus (+) sign to the left of any heading reveals the subfolders below it, and the plus sign changes to a minus (-) sign. Clicking the minus sign to the left of any folder hide its subfolders.

Clicking on a folder that containing compatible audio files (.aif, wav, mp3) displays the songs in the File List on the right hand side of the Browser. However the File List will be empty if Torq cannot identify any "playable" files within a folder.

Once you have located a song you can either preview it in your headphones before using it in a mix, or you can load it onto a deck.

Torq offers a number of useful preset Key Commands for working within the Browser. These can be found in Appendix A, listed under "Browser Commands" on page 119.

Refer to "File List" on page 31, for more information about the File List features including Song Preview.

Snapshots

Creating Snapshots lets you save multiple movements, such as button presses and knob adjustments, into a macro that can be triggered by a single keystroke. Torq manages a collection of Snapshots which can be recalled interchangeably, even in rapid succession. Snapshots can even be layered together to create massive changes in your mix.

Refer to Chapter 11, "Snapshots" for more information about creating and using Snapshots

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Database

?Question¿ Appropriate screenshot here.

The Database is a collection of folders located throughout your computer system (including external drives). This is feature lets you quickly and efficiently locate and organize your music collection. Once a folder is added to the Database, the songs it contains will be listed in the File List whenever you click on the Database heading. If you have multiple folders assigned to the Database, all the files in all folders will be listed simultaneously in the File List. Therefore, to use the Database efficiently, you'll only want to assign folders that contain music you'd like to spin.

Adding Folders to Database

To add a music folder to the Database:

1 Locate the folder you want to add to the Database.

2 Right-click (CTRL-click on Mac) on the folder.

3 Choose "Add to database" from the pop-up menu.

4 The folder will then be assigned to the Database (you can click the "+" in front of Database to see this new folder listed beneath it).

You can stop this process at any time while it is running by right-click (CTRL-click on Mac) on the folder, and choosing "Stop Addition to DB."

Now, when you click on Database, the contents of the folder you just assigned will be listed in the File List.

Adding Multiple Folders

You may find that one folder will contain many folders that you'd like to add to the Database. A great example of this is when your music is automatically sorted by a program like Apple iTunes. Typically, there will be a folder for each artist in your collection, and each of these folders will contain individual folders for each album by that artist. Therefore, if you want to add all the music by this particular artist to the Database, you actually need to add all of the individual album folders.

To add folders, including their subfolders, to the Database:

1 Locate the folder containing the sub-folders you want to add.

2 Right-click (CTRL-click on Mac) the folder and select "Add folder to Database Recursively." Torq will automatically add the folder, along with all its sub-folders, to the Database.

You can stop this process at any time while it is running by right-click (CTRL-click on Mac) on the folder, and choosing "Stop Addition to DB."

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Adding Folders from Your OS

If you'd prefer, you can add folders to the Database by dragging them from your operating system into the Torq Browser. You can do this using either Explorer for Windows or Finder for Mac.

To add folders from your OS:

1 Find your desired folders using the tools of your operating system (Explorer or Finder).

2 Click and drag the folder from the operating system onto the Database.

3 Release the mouse button and the folder will be added to the Database.

4 You can also include the subfolders by holding the Ctrl key (Alt key on Mac) while dragging the folder into the Database.

Searching Specific Database Folders

Clicking on the Database heading will display every song contained in the Database in the File List to the right of the Index.

If you would like to confine your search to only a particular folder within the Database:

1 Click the (+) in front of the Database heading. The list will expand to show all of the folders contained in the Database.

2 Click on one of the folders. The File List will be updated to only show the songs contained in that specific folder.

Removing Folders from Database

There are two ways to remove folders from the Database. You can either search through the folders currently listed within the Database and remove them, or you can locate the original folders on your hard drives to remove them.

To remove folders directly from the Database:

1 Click the plus sign next to the Database. This will drop down a list of all folders assigned to the Database.

2 When you have found the folder you want to delete, right-click it.

3 Choose "Remove" from the pop-up menu. The folder will then be removed from the Database while the original audio files will still remain on your hard drives.

To remove folders from the Browser:

1 Go to the "Files" listing in within the Index and locate the original folder on your computer.

2 Right-click the folder.

3 Click "Remove" to remove this folder only. If the folder contains sub-folders that are part of the Database, they will remain in the Database.

4 To remove the folder and all its subfolders, click "Remove from Database Recursively."

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Files (Hard Drives and CD's)

Torq can also search any internal or external hard drive on your computer including any CD's found in the optical drive. Clicking the plus sign (+)to the left of the Files category reveals a listing of all drives and CD's on the system. Clicking the plus sign (+) to the left of a drive or any or its subfolders reveals its contents immediately below it. When you click on a subfolder containing audio files (.mp3, .wav, .aif), the file list on the right side of the Browser window. You can explore the contains and add folders from any drive to the Database using the methods described earlier.

Crates

?Question¿ Need information for the Crates browser category.

Creating New Crates

To create a new Crate:

1 Right-click (CTRL-click on Mac) on the Crates heading in the Index and choose "Create Crate" from the pop-up menu.

2 A new Crate called "Empty Crate" will appear below the Crates heading.

3 If there is already an "Empty Crate" in the list, a number will be appended to the name to differentiate it from the other(s). For example "Empty Crate (1)."

Renaming a Crate

To create a new Crate:

1 Right-click (CTRL-click on Mac) on a Crate in the Index and choose "Rename" from the pop-up menu.

2 Enter a new name for the Crate.

Adding Songs to Crates

Torq give you the choice of either adding songs to an existing Crate, or adding them to a new, previously non-existent Crate.

To add songs to an existing Crate:

1 Navigate to the folder containing the song or multiple songs you want to add.

2 Click the song or multiple songs you want to add.

You can use the usual methods of selecting multiple songs provided by your operating system.

3 Right-click (CTRL-click on Mac) on the song or any of the multiple songs that are highlighted.

4 Choose "Add to Crates" from the pop-up menu.

5 Choose the name of an existing crate.

The song or multiple songs are be added to the Crate, and will be visible when it is accessed.

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To add songs to a new Crate:

1 Navigate to the folder containing the song, or multiple songs you want to add.

2 Click the song, or multiple songs you want to add.

You can use the usual methods of selecting multiple songs provided by your operating system.

3 Right-click (CTRL-click on Mac) on the song or any of the multiple songs that are highlighted.

4 Choose "* Add to new crate" from the pop-up menu.

A Crate called "NewCrate" is created containing the song or songs, and its name will be highlighted allowing you to rename it.

Removing Songs from a Crate

To remove songs from a Playlist:

1 Right-click (CTRL-click on Mac) the song, or multiple songs you wish to delete.

You can use the usual methods of selecting multiple songs provided by your operating system.

2 Select "Remove file(s)" from the pop-up menu.

3 Torq will remove the song from the Crate, but it will not be deleted from your computer.

Reordering Songs in a Crate

The change the order in which your songs are appear in a Crate:

1 Click and drag the song up or down in the list.

2 If you drag the song on top of another existing song, releasing the mouse button will cause the song to be inserted above the song in the Crate.

Deleting a Crate

To delete a Create:

1 Right-click (CTRL-click on Mac) on the Crate and choose "Remove" from the pop-up menu.

2 The Crate will be removed from the Crates list.

⚠ *If the Crate you are deleting contains songs, and also resides inside another Crate (as a sub-crate), a dialog box will appear asking if you want to "move the songs in the sub-crate into the parent crate." You choices are "Yes," "No," or "Cancel."*

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Duplicating a Crate

If you want to create a new Crate based on an existing Crate, you can create duplicate, and then add songs to the new one if you want to.

To duplicate a Crate:

1 Right-click (CTRL-click on Mac) the Playlist you would like to duplicate and choose “Duplicate” from the pop-up menu.

2 A duplicate of the selected playlist will be created and displayed underneath it.

3 A number will be added to the name of the Playlist to differentiate it from the original. For example “Crate 1.” This duplicate Crate can be renamed using the method described above.

Playlists

?Question¿ Appropriate screenshot here

While many DJ's will perform “off-the-cuff” without any previous rehearsal or forethought, other DJ's will “pre-program” their sets, either due to the complexity of the set, or simply as a method for remembering vital songs (this can be helpful for wedding or party DJ's who take requests).

Torq features Playlists to help you organize and store lists of songs. You can create and manage multiple Playlists, each with as many songs as you like. Each Playlist can then be edited by adding or deleting tracks, or by rearranging their order within the Playlist.

Creating New Playlists

To create a new Playlist:

1 Right-click (CTRL-click on Mac) on the Playlists heading in the Browser and choose “New Playlist” from the pop-up menu.

2 A new Playlist titled “Empty Playlist” will appear below the Playlist heading (click the plus sign in front of Playlists in order to see this list).

3 If there is already an “Empty Playlist” in the list, a number will be appended to the name to differentiate it from the other(s), i.e. “Empty Playlist 1.”

Rename Playlist

1 Right-click (CTRL-click on Mac) on your desired Playlist and choose “Rename Playlist” from the pop-up menu.

2 Type in the new name you would like to give the Playlist and hit the Enter key on your computer keyboard.

3 The Playlist will display its new name.

Deleting a Playlist

1 Right-click (CTRL-click on Mac) on the Playlist and choose “Remove” from the pop-up menu.

2 The Playlist will be removed from the list in Torq. It will still be on your computer, however, stored in the “Deleted Playlists” folder. ~~These Playlists will be kept for up to 30 days, then permanently deleted~~.

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Duplicating a Playlist

If you like a particular Playlist and would like to build a new one based upon it, you can duplicate (or copy) it for future modification.

To duplicate a Playlist:

1 Right-click (CTRL-click on Mac) the Playlist you would like to duplicate and choose "Duplicate Playlist" from the pop-up menu.

2 A duplicate of the selected playlist will be created and displayed underneath it.

3 A number will be added to the name of the Playlist to differentiate it from the original. Of course, you can rename this Playlist using the method described above.

Adding Songs to a Playlist

1 Once you have created and selected a Playlist, you'll begin adding files to it using the following procedure:

2 Using the Browser or Database, locate the song (or songs) you'd like to add to the Playlist.

3 Right-click (CTRL-click on Mac) the song name(s) and select "Add to Playlist" from the pop-up menu.

4 The song(s) will be added to the bottom of the Playlist.

Removing Songs from a Playlist

You can remove songs from a Playlist as follows:

1 Right-click (CTRL-click on Mac) the song in the Playlist you wish to delete.

2 Select "Remove from Playlist" from the pop-up menu.

3 Torq will remove the song from the Playlist, but the song will remain in the Torq Database (it will not be deleted from your computer).

Reordering Songs in a Playlist

The order in which your songs are displayed in the Playlist can be changed by doing the following:

1 Click and drag the song up or down in the list.

2 If you drag the song on top of another existing song, releasing the mouse button will cause the song to be inserted above the song in the list.

Activating a Playlist

When you select a Playlist, Torq runs a quick scan of your computer's drives to ensure all the audio files referenced by the Playlist are present on the computer. If Torq cannot locate one or more of the songs from the Playlist (possibly because the drive containing the song is no longer connected to the computer, or the source file has been deleted), a pop-up dialog will appear with the following message: "Cannot find one or more of the files used in this Playlist. What would you like to do?" You will then have a choice of clicking one of the following buttons.

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Ignore

Clicking this button will allow the Playlist to load, however all missing songs will be displayed in red in the File List window.

Auto-scan

Clicking this button will cause Torq to search all hard drives connected to your computer in an attempt to find the missing file(s). If a file is found with the same name but in a different location, another dialog box will appear with the following message: "Would you like to use this file for [name of missing file]?"

- By choosing "Yes," Torq will use the file and automatically assume that the rest of the missing files will also be in this same folder. Once found, these files will automatically be loaded. If the other missing files are not in this location, Torq will continue searching the computer until another file is found.
- Choosing "No" will allow the search to continue for another possible file in a different location.
- If the search completes without finding the proper file, a dialog box will appear with the following message: "Cannot find [name of missing file]." When you click "OK" Torq will display the file in red in the File List, indicating that the song cannot be played. If there are other files to search for, the search process will continue.

Manual

Clicking this button will open a standard operating system dialog box that will allow you to manually search for the audio file on your hard drive(s). Although you are searching for a specific missing file, it is possible to select any audio file to be used in its place. If you choose a file that is different than the missing file shown in the File List, the ID3 tag info for the new file will be shown (in the Playlist) in place of the original song.

Saving a Playlist

All playlists created using Torq are automatically saved to your local hard drive. These playlists can be opened by any application that supports the .m3u playlist format.

Torq playlist location, Windows XP:

C:\Documents and Settings\[username]\Application Data\M-Audio\Torq\Playlists

Torq playlist location, Windows Vista:

C:\Users\[username]\AppData\Roaming\M-Audio\Torq\Playlists

Torq playlist location, Mac:

~/Library/Application Support/M-Audio/Torq/Playlists

⚠ *In Windows Vista and Windows XP systems, the playlists are located within hidden folders. You will need to change your Folder Options > View settings to make these hidden folders visible before you can access the playlist files.*

Windows XP From "My Computer" click on the Tools menu, select Folder Options, click on the "View" tab and then select "Show hidden files and folders" from the list of options.

Windows Vista From the Windows Control Panel, select Appearance and Personalization, Folder Options, click on the "View" tab and then select "Show hidden files and folders."

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Loading a Playlist

Torq can import Playlists created by other programs if they conform to the .m3u file format.

To load one of these Playlists:

1 Right-click (CTRL-click on Mac) the Playlist's heading in the Browser Index.

2 Select "Load Playlist" from the pop-up menu.

3 A standard dialog box will open, allowing you to locate and select a Playlist.

4 Once selected, the Playlist will be imported into Torq and Torq will begin checking for the necessary files (explained above).

Session Playlist

?Question¿ screenshot here.

The Session Playlist is an automatic Playlist that keeps track of every song you've played since you launched Torq. This is handy when you need to see if you've played a song already, or if you need to reference a list of what you played at a previous gig.

An empty Session Playlist is created each time you launch Torq. It is named "Session Playlist YY-MM-DD" where YY-MM-DD represents the year, month, and day of the Playlist, respectively. Each song you load onto a Deck will automatically be added to the bottom of the Session Playlist.

If a Playlist already exists with the current date, a number will be appended to differentiate it.

Torq will only store Session Playlists for the last 30 days. Any Session Playlists that are older than 30 days will be automatically deleted in order to keep your hard drive from becoming overpopulated with Playlists.

Rename the Session Playlist

If you find that you'd like to permanently keep a Session Playlist, all you have to do is rename it. Once renamed, the Playlist will be moved from the pool of Session Playlists and be kept with your normal Playlists.

To do this:

1 Right-click (CTRL-click on Mac) on the Session Playlist and choose "Rename" from the pop-up menu.

2 Type in a new name for the Playlist and press Enter.

3 The Playlist will be saved. If you renamed the current Session Playlist, a new Session Playlist will be created that will track all songs played from that point onward.

Deleting Session Playlists

You can delete the Session Playlists using the same method for deleting standard Playlists. If you delete the current Session Playlist, a new one will be created that will track all songs played from that point forward.

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iPods

Torq also allows direct access to the contents of any connected iPod (excluding the iPod Shuffle, iPod touch, and iPhone). When an iPod is connected, it will be listed in the Browser window.

?Question¿ Screenshot here. iPod in focus.

Like the iTunes Library above, the contents of the iPod can be searched using the Library or Playlist headings. You can also include the contents of the iPod in the Database by doing the following:

1 Open the Preferences.

2 Click on the Behavior tab.

3 Next to "Search iPod With Database," select "Yes."

4 Close the Preferences.

Torq will now include the songs from the iPod the next time you click the Database heading.

When using an iPod with a large song collection, it may take Torq a moment to download the entire music list the first time the device is accessed.

⚠ *Torq streams music directly from the iPod. Do not disconnect the iPod until you have playing music from it.*

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File List

The window to the right of the Browser pane is called the File List. If you have selected a source in the Browser that contains music (such as the Database or an individual folder), the songs contained therein will be listed here. The File List not only shows you the name of the song, but also shows the artist name, album name, track number, genre, and other fields contained within the song's ID3 tag. These additional categories can help you find song with greater efficiency.

While ID3 tags will support storage of the information listed above, it is common to find music files with some (if not all) of the ID3 fields blank. In these instances you can manually fill in the missing information to aid future file searches.

Editing Fields

Torq will extract the relevant song information from the file's ID3 tag in order to populate the fields of the File List as described above. You are free to edit the information shown in the File List simply by double-clicking a field, typing in new data and hitting Enter.

Torq does not update the song's ID3 tag with your edits. Instead, your edited fields are stored in a special file with the same name as the song, but with the extension ".tqd" at the end. This is the Torq Data file. By saving your edits to the TQD file, Torq can save your changes much faster (changing an ID3 tag requires re-writing the entire audio file, something that could affect system performance during live use). Additionally, the audio file could become corrupted during the re-write process. So, Torq leaves your precious music files untouched by saving data to the TQD file.

Sorting the List

There are fourteen categories that can be displayed across the top of the File List window: Artist, Song, Album, Track # (Track Number), BPM (Beats Per Minute), Key, Genre, Length, Comment, File Type, Bitrate, Label, Year and Filename. These categories are taken from the ID3 tags of your music files or, in the case of song length and BPM, calculated as part of Torq's file analysis. An ID3 tag is a standard format for storing additional information within a music file.

You can resize the width of any of these columns simply by clicking and dragging left and right on any of the vertical lines separating the columns. Additionally, you can re-order the arrangement of the columns by clicking and dragging the column name to a new position (the column name will turn white while doing this). If you wish, you can also hide certain columns from view by right-clicking on a category name and choosing which items to display from the pop-up menu.

You can sort the contents of the File List by clicking on any one of the categories at the top of the window. For example, if you click the "Album" category, the File List will be sorted alphabetically (A to Z) by Album name. If you click "Album" again, the order will be reversed (Z to A). You could also click on the BPM column to sort all your songs by their BPM. This can be very useful when looking for songs of a similar BPM.

Click the Reset button to return to the default sort order.

The Filename column is available in the event that the music you're trying to use does not contain an ID3 tag (such as AIFF and WAV formats) or does not have the proper text filled in. Here, the actual name of the file (as it exists on your hard drive) will be shown.

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Searching the List

The simplest method for searching is to type a keyword (or keywords) into the Search field above the Database/Browser.

To search the list:

1 Click the Database heading in the Browser pane to select it.

2 Click in the Search field and type in your search term(s). Terms can include an artist's name, a song title, BPM, etc.

3 As soon as you start typing, Torq will begin searching the Database for the letters you have typed. There is no need to hit the Enter key on your keyboard.

4 When you stop typing, you'll have a list of all files that contain the search term in one of its fields.

For example, if you type the word "love" into the search field, Torq could return the following results:

Artist	Song	Album
Deee-Lite	Power of Love	World Clique
Jennifer Love Hewitt	Can't Stand in the Way of Love	Let's Go Bang
Love and Rockets	Angels and Devils	Express
Madonna	I'd Rather Be Your Lover	Bedtime Stories
Sade	Flow	Lover's Rock

Search Categories

As you can see, the above search worked—it found songs that contained the word "love" in any category. However, this may not be quite what you were looking for. You may have actually wanted files with "love" in the song's name only. To search for such titles, you'll need to confine the scope of the search to the Song category only.

To confine a search to a particular category:

1 Hold down the SHIFT key and click a category name. The category name will turn red.

2 Torq will refine its search results and only show songs that contain your search term within the selected field.

3 You can hold SHIFT and click additional categories if you wish (i.e. you can select Song and Album simultaneously).

4 SHIFT-clicking a selected category will de-select it.

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Using our example above, confining the search to the Song category would yield the following results:

Artist	Song	Album
Deee-Lite	Power of Love	World Clique
Jennifer Love Hewitt	Can't Stand in the Way of Love	Let's Go Bang
Madonna	I'd Rather Be Your Lover	Bedtime Stories

Now, only the songs with "love" in their titles are shown.

Filter Field

Torq offers another method for refining your searches by means of the Ignore field. Here, you'll enter terms that you want Torq to omit from the search results. The Ignore command will only be applied to the currently selected categories (explained above).

To omit terms from the search results:

1 Click to put a cursor in the Ignore Field.

2 Type in the term you would like to filter out of the search.

3 Torq will display only the songs that contain the information required in the Search field while omitting the songs that fit the criteria of the Ignore field.

Again, using the example above, entering the term "Lover" into the Ignore field will return the following list:

Artist	Song	Album
Deee-Lite	Power of Love	World Clique
Jennifer Love Hewitt	Can't Stand in the Way of Love	Let's Go Bang

You'll see that, as a result, "I'd Rather Be Your Lover" has been removed from the list.

⚠ *References to artists and bands is for informational purposes only and does not imply an endorsement or sponsorship of Avid by such artists or bands.*

Song Preview

Once you have located and clicked on a song in the File List, it can be previewed within the browser by pressing the Preview button (headphone icon) on the left end of Browser search bar. Pressing this button plays the song sending the audio signal through the PFL/Headphone cue to your headphones.

Refer to "PFL/Headphone Cue" on page 60 for more information about the PFL/Headphone Cue.

Clear Button

When you are done with your search and are ready to begin a new one, press the Clear button. This will clear the Search and Ignore fields as well as deselect any categories that had been previously selected.

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Chapter 5: The Decks

The Decks play the music that you load onto them to mix and effect using all the tools in Torq. Traditionally, a DJ's decks are turntables or CD players. With this in mind, the four Decks in Torq have been designed to emulate turntables and CD players, as well as offering a special hybrid mode only possible with software.

Each of the four Decks has various functions for controlling playback of the music in great detail. This includes changing the speed and/or key of the song, looping sections of audio, and jumping to other locations within a song. Using these controls as described below, you can match tempos of various songs during a mix, or re-arrange a song.

Torq offers a number of useful preset Key Commands for working within the Deck. These can be found in Appendix A, listed under "Deck Commands" on page 120.

?Question¿ 4 Deck screenshot here

Four Deck Mode vs. Two Deck Mode

?Question¿ 2 Deck Here

Torq 2.0 gives you the option of working in either Four Deck Mode (Decks A, B, C, and D), or Two Deck Mode (Decks B and C). Switching Torq from Two Deck to Four deck Mode is achieved by clicking the Torq Mode button located in the Tool Bar. When you switch to Two Deck Mode the number 4 in the icon will change to a number 2.

?Question¿ Images of the Torq Mode button set to 4 deck and 2 deck.

Although the functionality is the same. there are slight differences in how certain features are accessed. Where applicable this user guide will make note of these differences.

Placing your mouse cursor over the various on-screen controls will display their names in the bottom edge of the Torq interface. You can also user your mouse wheel to control the on-screen knobs and sliders.

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Deck Switch

The Deck Switch feature offers a set of key commands for assigning any deck to either side of your two-deck hardware. This lets you bring an assigned deck into focus as the "Target Deck" to be controlled by your hardware. This capability also extends to situations where you want or need to target and control any of the decks with a single hardware deck, or with your computer keyboard and mouse.

Once a deck has been selected, Torq lets you access and control numerous other functions on a per Deck basis, using additional key commands listed in Appendix A under "Deck Commands" on page 120.

When the "Highlight Deck Assignment" option is set to "Show" (default) on the GUI page of the Torq Preferences, the edge of currently targeted decks will be highlighted with a colored rectangle. Torq Decks assigned to the left side of your controller are highlighted in green, while Decks assigned to the right side are highlighted in purple. If a deck is highlighted in red, it will be controlled by both sides of your hardware.

Refer to Chapter 14, "Torq Preferences" for more information about the available Torq preference settings.

The the table below lists key commands for assigning the Decks to either side of an M-Audio Xponent DJ Control surface. However it is also important to remember that commands also bring the decks into focus when using your mouse and keyboard to control Torq. If you are using qualified third-party hardware, refer to the its documentation.

⚠ *Mac users should go into the Keyboard Preferences in Mac OS X, and change the following options before using Torq key commands: On the Keyboard page, Enable "Use all F1, F2, etc. keys as standard function keys." On the Keyboard Shortcuts page under Dashboard & Dock, disable "Dashboard" (F12). Then disable "Exposé" under Exposé & Spaces.*

Deck Assignment/Selection	Mac Key	Windows Key
Left Xponent side controls Deck A	F5	F5
Left Xponent side controls Deck B	F6	F6
Left Xponent side controls Deck C	F7	F7
Left Xponent side controls Deck D	F8	F8
Right Xponent side controls Deck A	F9	F9
Right Xponent side controls Deck B	F10	F10
Right Xponent side controls Deck C	F11	F11
Right Xponent side controls Deck D	F12	F12

⚠ *The corresponding Function keys listed above for selecting Decks B and C are the same in both Four Deck and Two Deck modes.*

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Deck Selection

The following example explains how to bring a deck into focus as the Target Deck while controlling Torq with either a single side of your controller, single-deck hardware, or your mouse and keyboard.

To bring a Deck into focus as the target:

1 Decide which Deck you want to target. For example, Deck D

2 Momentarily press or tap the Shift key.

3 Press the corresponding Function key for the deck you are targeting. For example F8 (Deck D).

The newly targeted deck will be highlighted with a green or purple rectangle around the edge. If you are using a controller

Deck Assignment

The following instructions explain how to assign Torq Decks to either side of your hardware controller. Again, this feature is designed to let you assign any deck to either side of your controller. Although the table above and the following example refers to the M-Audio Xponent DJ Controller, these steps also apply to qualified third-party hardware. Refer your third-party documentation for additional manufacturer specific information.

To assign a Torq Deck to the left side of your controller:

1 Choose a deck to assign to the left side of your Xponent. For example, Deck C.

2 Press the corresponding Function key for the Deck. For example F7.

A green rectangle appears around the edge of Deck C, indicating that it is the Target Deck for the left side of your Xponent. Moving or pressing a slider, knob or button on the left side of your hardware controls its corresponding on-screen Torq function or parameter.

To assign a Torq Deck to the right side of your controller:

1 Choose a deck to assign to the right side of your Xponent. For example, Deck D.

2 Press the corresponding Function key for the Deck. For example F12.

A purple rectangle appears around the edge of Deck D, indicating that it is the Target Deck for the right side of your Xponent. Moving or pressing a slider, knob or button on your hardware controls its corresponding on-screen Torq function or parameter.

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Loading Songs onto the Decks

Torq lets you choose the following methods for loading a song from the File List onto any of the Decks

Drag and Drop to a Deck

To drag and drop a song to a deck:

1 Click and hold on the desired song in the File List. It will become highlighted.

2 While continuing to hold the mouse button, drag the song to any of the Decks.

3 Once the song is over a Deck, release the mouse button and the track will load.

Drag and Drop to the Waveform Display.

?Question¿ Screenshot of four deck waveform display

Songs can also be loaded onto a deck by dragging it to the Waveform Display which is located above the Mixer.

In Four Deck Mode, dragging a song to the top of the Waveform Display loads it onto Deck A, while dragging it to the upper middle loads it onto Deck B. Dragging it to the lower end of the display loads it onto Deck D, while dragging it to the lower middle of the display loads it onto Deck C.

?Question¿ Screenshot of two deck waveform display.

In Two Deck mode, dragging a songs to the top half of the Waveform Display loads it onto Deck B, and dragging it the lower half loads Deck C.

Refer to Chapter 6, "Waveform Display" for more information about the Waveform Display.

Using the Function Keys

To load a deck using the Function Keys:

1 Click on the desired song in the File List.

2 Press one of the following: F1 (for Deck A), F2 (for Deck B), F3 (for Deck C), or F4 (for Deck D).

In Two Deck Mode the key assignments for Decks B and C are the same as in Four Deck Mode.

When using a Mac laptop, you may need to hold the Fn key while pressing the Torq function keys in order for these features to work.

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Copying Songs to Other Decks

?Question¿ Image of Make Double Button

Pressing the Make Double button lets you copy a song including all Markers such as Loop Points, Cues, and Tempo Anchors to another Deck.

For more information about Cues, Loops, and Tempo Anchors refer to "Markers" on page 37. Refer to "Tempo Anchors" on page 54 for more information about Tempo Anchors.

To copy a song to another deck:

1 Load a song onto a deck. For example, Deck A.

2 Choose a destination Deck. For example Deck D.

3 Choose Deck A from the dropdown menu of the destination deck.

4 Click the Make Double button on destination Deck.

The destination Deck, in this case Deck D, will contain a copy of song on Deck A.

Unloading Songs from the Decks

To unload a song from a Deck, hold Shift while pressing F1 (for Deck A), F2 (for Deck B), F3 (for Deck C), or F4 (for Deck D).

In Two Deck Mode the key assignments for Decks B and C are the same as in Four Deck Mode.

Displays

Each Deck has various informational displays on the interface. These are mostly for relaying information to you, such as which song is playing, how long it's been playing, and how much time is remaining.

Song Name

The top area of each Deck displays the title of the song that was loaded onto it. This is the same as the title listed under the "song" column heading in the File List. If there is no title listed in the File List, the name of the actual file will be shown instead.

Artist Name

Below the Song Name is the Artist Name. Like the Song Name, this field will be empty if there is no entry in the Artist column of the File List.

Time Elapsed

The time display on the left side of the deck under the Artist Name shows the current location of the song, marked by the yellow Now Line in the Overview Waveform Display (see "Overview Waveform" on page 35). This is expressed in hours/ minutes/seconds/frames (at 30 fps). When the Current Position Marker is at the beginning of the song, the Time Elapsed will be 0:0:0.0.

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Time Remaining

The field to the right of the Time Elapsed indicates how much time is left before the song ends. At the beginning of the song, the Time Remaining will be the same as the entire length of the song and decrease as the song progresses.

The Overview Waveform and Waveform Display will flash red when there is less than 30 seconds remaining in a song.

Overview Waveform

Each Deck includes an Overview Waveform display which shows a miniaturized version of the song's waveform in its entirety. This display serves several purposes:

- It allows you to see where the breaks and builds are in a song before they happen.
- The yellow Now Line indicates your current location within the song.
- White QuickCue points (see "QuickCue" on page 37)and a white bar representing Tempo Anchors (see "Tempo Anchors" on page 54) will be superimposed over this waveform.
- You can click anywhere in this waveform and playback will jump to that location.

Transport Controls

The Transport buttons let you control various aspects of song playback as described below.

Advance

?Question¿ Screenshot of advance Buttons

These buttons let you move the current playback position forwards or backwards one beat at a time.

Offset Buttons

?Question¿ Screenshot of Offset Buttons

Sometimes when mixing two songs together, you may find that the beats are aligned with each other, yet the two songs are still out of phase. This is most obvious when one song is offset by one beat, causing the snare drums of the tracks to be out of alignment. The Offset buttons can be used to correct this. Pressing these buttons will make the Current Song Position jump forward or back by one beat-length.

If you have the Sync Mode set to "Bar" in the Toolbar or Torq Preferences (Synq Reference), the Offset buttons will have no effect when the Deck's Sync button is on. This is because Torq will counteract a one-beat offset when set to Bar mode. If you want to offset the music by one beat when Sync is on, you'll need to offset the Phase Grid as explained in "Synchronization," or switch Sync Mode to "Beat."

Refer to Chapter XXX Preferences for more information about Synq Reference.

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Seek

?Question¿ Screenshot of seek Button

The Seek buttons are used to Fast forward or rewind through the song, allowing you to find certain points (or beats) within the track from which you can start playing.

If you click briefly on the Forward or Backward buttons, the music will jump only slightly in that direction.

If you click and hold one of these buttons, Torq will scroll through the song and stop when you release the it.

To jump to either the beginning or end of the song, hold the Shift key while clicking a Seek buttons.

Cue

?Question¿ Screenshot of Cue Button

The Cue button will establish a primary Cue Point within a song. A Cue Point is a reference position within the track that you can jump to instantly, rather than having to seek through the track to find it. Typically, a DJ will set the Cue Point where the beat begins in a song. When a song is first loaded onto a Deck this Cue Point appears as a red line at the beginning of the song (within the Waveform Display.

The Cue button works in the following manner:

- If you hold SHIFT and press Cue, a Cue Point will be placed at the current location, even if the song is already playing.
- If a song is playing, pressing the Cue button will make the song jump to the Cue Point and pause there.
- If Cue is pressed and held again, the music will begin playing from the Cue Point. The music will stop playing when the Cue button is released and the song will jump back to the Cue Point.
- If a song is paused in a location different from the Cue Point, pressing the Cue button will set the Cue Point to the current location.
- If you hold Cue and press the Play/Pause button, the music will continue to play after you release both buttons.

Play/Pause

?Question¿ Screenshot of Play/Pause Button

Clicking the Play/Pause button starts and stops playback.

When you pause the music, the song will not return to the beginning—it will stay in the same location as when you stopped it. If you want to return to the beginning, use the Seek buttons.

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Markers

Quantize Button

?Question¿ screenshot of Quantize button.

Although the Quantize button is located in the Torq Tool Bar it's included in this section because it is used for quantizing the position of QuickCues and Loop Points (see "Loop" on page 38) to the nearest 16th note.

You can also set this behavior as a default, by changing the "Quantize Cue and Loop Points" option in the Behavior Preferences to "Yes" (see Behavior Preferences on page XXX).

QuickCue

In addition to the primary Cue Point described above, Torq allows you to set up to five QuickCue Points in a song that are assigned to the QuickCue buttons below the Overview Waveform display. These buttons can then be used to quickly jump between the various QuickCue points. Torq will save the locations of the five QuickCue points with each song so they will be available the next time you play the song.

Setting QuickCues

There are a few different ways to set QuickCue Points:

- Click the Set button, then click one of the four QuickCue buttons. A QuickCue Point is set at the current location and visible in the Overview Waveform display. This can be done while a Deck is playing or paused.

– or –

- Hold the Shift key while clicking one of the QuickCue buttons. A QuickCue Point is set to the Now Line and is visible in the Overview Waveform display. This can be done while a Deck is playing or paused.

If Quantize is switched on in Torq's Toolbar, new QuickCue points will be aligned to the nearest 16th-note in a song.

If you try to assign a QuickCue to a button that is already set to a particular location, the old QuickCue location will be overwritten in favor of the new one.

Playing QuickCues

Once you've set a couple QuickCue Points, all you have to do is click on the desired QuickCue button and the Deck will immediately jump to that location and begin playing. If you set your QuickCue Points at key positions within the song, you can immediately jump to different sections on-the-fly, such as jumping ahead to a chorus or back to the intro.

While a song is playing, you can use "CTRTL + QuickCue Button" to jump to a QuickCue within the track without playing the selected cue.

If you reposition playback using one of the QuickCue buttons while Looping is activated, playback will jump to the new location. Torq automatically places the Loop In Marker at the new location and places the Loop Out Marker in a position which maintains the same loop length.

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Clearing QuickCues

If you'd like to clear all of the QuickCues in a song, click the Clear button.

Loop

Torq offers you two different ways to loop audio. You can specify the start and end points of the loop manually, or you can capture loops of a specific length using the QuickLoop buttons. Furthermore, Torq will help you make the perfect loop every time by automatically matching your loop points to the tempo of the song.

Loop In/Out

Looping an entire song doesn't have much benefit for a DJ, so Torq allows you to move the Loop Markers by using the Loop In and Loop Out buttons:

To move loop markers in real time:

Load a song onto a Deck and press Play. When playback reaches the beginning of the section you want to loop, click the Loop In button. This places a bright yellow Loop In Marker in the Overview Waveform for the deck, and at the orange Now Line in the Waveform Display above the Mixer. If the Quantize button is active, the Loop In marker will snap to the beginning of the nearest 16th-note in the song's waveform.

When playback reaches the end of the section you want to loop, click the Loop Out button. This will place a Loop Out Marker at the Now Line, which will also snap to the nearest 16th-note. At the same time, the Loop On/Off button will automatically be activated causing playback to jump back to the Loop In Marker. The music will now loop between these two points indefinitely.

When you have finished looping this section of the song, you can click the Loop On/Off button to turn it off. Now, when playback reaches the Loop Out Marker, it will simply pass it and continue playing the rest of the song.

If you reposition playback using one of the QuickCue buttons while Looping is activated, playback will jump to the new location. Torq automatically places the Loop In Marker at the new location and places the Loop Out Marker in a position which maintains the same loop length.

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Loop Out Behavior

By default, Torq places the Loop Out marker at a position that is the closest multiple of 2 in length from the Loop In marker. In other words, Torq will only allow you to make loops with the lengths of 1 beat, 2 beats, 4 beats (1 bar), 2 bars, 4 bars, 16 bars, etc. This makes it easier to achieve even loops without having to press the Loop Out button with 16th-note accuracy.

Torq has a second Loop Out mode that always quantizes the Loop Out marker positions to the nearest 16th note:

To change the Loop Out Behavior:

1 Open Torq's Preferences and click on the Behavior Tab.

2 Switch the Loop Out mode from "Smart" to "16th"and close the preferences.

Now the Loop Out marker will be quantized, and snap to a location that is the nearest 16th-note length from the position of the Loop In marker. However, this requires that you press the Loop Out marker within a 16th-note of where you want the loop to end.

Loop On/Off

The Loop button will indicate whether Torq is looping audio or not. Whenever this button is illuminated, Torq will be looping something, whether triggered with one of the QuickLoop buttons or set manually with the Loop In and Loop Out buttons. Click this button to toggle the current selected loop.

QuickLoop

More often than not, a DJ will loop audio that is an even number of beats or bars. For example, a single bar (four beats) or two bars (eight beats), or micro-loops of only one or two beats. Instead of having to quickly press the Loop In and Loop Out buttons to create loops of these lengths, Torq provides one-button access to these loops via the QuickLoop buttons.

Using QuickLoops

The QuickLoop buttons allow you to instantly loop a section of a song by a preset length. By default, each of the four buttons represents a different bar length; one bar, two bars, four bars, and eight bars. Simply press one of these buttons at the beginning of the section you want to loop and Torq will automatically place the Loop In and Loop Out Markers in the appropriate locations:

To automatically loop a section:

1 Load a song into a Deck and press play.

2 Press the QuickLoop button labeled "1." The Loop button will be switched on and the Loop In Marker will immediately be placed at the Now Line, with a corresponding Loop Out Marker placed exactly one bar later and the song will begin looping a perfect bar.

3 To turn the loop OFF, click the Loop button. Playback will now proceed beyond the Loop Out Marker.

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Doubling the Length of a QuickLoop

Looking at the example above, once the one bar loop has been set, Torq lets you double its length by holding down the Shift key and pressing the "1" QuickLoop button. If needed you can increase the length up to four bars. In other word, the first time you double the one bar loop it will increase to two bars, and the second double will double the resulting two bar loop to four bars.

Pre-Loop

You can also reverse the behavior of the QuickLoop buttons by holding Shift when you create a loop. If you do this, Torq will place the Loop Out marker at the current playback location and will set the Loop In marker at the indicated number of Bars or Beats (depending on the QuickLoop Size preference) before the playback location. Using this feature, you can loop sections of audio that just played. For example, to repeat the last 2 bars of music that played, hold Shift and press/click QuickLoop 2.

QuickLoop Size Preference

As mentioned above, the default loop lengths for the four QuickLoop buttons are one bar, two bars, four bars, and eight bars. The QuickLoop Size preference allows you to change the QuickLoop buttons to beat values instead of bar values:

To set Quickloop to beat values:

1 Open the Torq Preferences menu and click on the Behavior tab.

2 Click the arrow next to QuickLoop Size option and choose "Beat" from the drop-down list.

3 Click the "X" to close the Preferences window.

Now, when you use the QuickLoop buttons as described above, you'll find that they capture loops of one beat, two beats, four beats, and eight beats in size.

Changing QuickLoop Lengths

Along with being able to capture loops of a specific size, the QuickLoop buttons also allow you to change the size of the loops after they have been made. Torq has two methods for changing QuickLoop lengths which are selected from the Preferences:

To set the QuickLoop preference:

1 Open the Torq Preferences menu and click on the Behavior tab.

2 Locate the QuickLoop Mode item—you'll see that it has two settings: "Cut and Grow" and "Direct."

When this "Cut and Grow" is selected, each additional press of a QuickLoop button will cut the current loop length in half. For example, if you press QuickLoop 4, Torq will grab a 4 bar loop. Pressing QuickLoop 4 again will result in a 2 bar loop. Press it again and you'll get a 1 bar loop. If you hold SHIFT while pressing the QuickLoop button, the loop will grow in size—doubling in length with each press of the button.

Direct mode resembles the behavior found on some DJ CD players. When selected, the QuickLoop buttons will become divisors once a loop has been captured. For example, pressing the QuickLoop 4 button will capture a 4 bar loop. Pressing QuickLoop 2 will now divide the loop length by 2 resulting in a 2-bar loop (4 bars / 2 = 2 bars). Pressing QuickLoop 4 will result in a 1-bar loop (4 bars / 4 = 1 bar).

Pressing QuickLoop 1 will reset the loop back to its original length (4 bars / 1 = 4 bars).

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Control (Deck Mode)

In order for Torq to feel familiar to all types of DJ's, each Deck can be operated in one of four different modes, which are accessed via the Deck Mode dropdown menu.

Vinyl Mode

Vinyl Mode causes a Deck to behave as if it was a turntable.

- Pressing Play/Pause to pause playback will cause audio to stop, just like pressing stop on a turntable.
- Clicking and dragging on the Scrolling Waveform will have audible results, like scratching a record.

Try out Vinyl mode:

1 Click and hold the mouse on the waveform. Playback will stop, as if you have placed your hand on a record to stop it.

2 Continue holding the mouse button, then drag the mouse left and right. This will scrub, or "scratch," the song.

Using your mouse to control a waveform in this manner is known as Scratch via Waveform.

Releasing the mouse button will cause the Deck to play the song back from the current location.

CDJ Mode

CDJ mode will make the Deck behave as if it was a CDJ player.

- Pressing Play/Pause to pause playback will cause the Deck to stop and begin repeating a small section of audio. The repeating section corresponds to the position where playback will resume when you press Play/Pause again.
- While the audio is repeating, you can click and drag on the Scrolling Waveform to move the start location—you'll hear the repeating audio slice change as you do this. Press the Cue button to set the Cue Point to this location and the repeating audio slice will stop.
- Clicking and dragging on the Scrolling Waveform while the Deck is playing will not stop audio. Instead, you'll be able to drag left or right to offset the playback speed of the track. Controlling the waveform in this manner lets you to align the track against another Deck when beat-matching.

⚠ *Switching to MIDI Platter Control Mode selects Vinyl Mode, while selecting CDJ Mode switches off MIDI Platter Control Mode. For more information about MIDI Platter Control Mode, refer to Chapter ??, "MIDI Platter Control."*.

Try out CDJ mode:

1 Click and hold on the waveform. The music will continue to play.

2 While holding on the mouse button, drag the mouse left. The playback tempo will be momentarily increased, making the waveform scroll a little faster to the left.

3 Now hold and drag the mouse to the right. Playback will continue playing forward, but at a slightly slower tempo. In this instance the waveform scrolls right to left at a slower rate.

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Using your the mouse to control the waveform in this manner while aligning the song with another deck is called “Nudge Via Waveform.” During this process, the Phase Grids for each song will become closer in line with each other as the synchronization between them improves.

As soon as you stop dragging, playback will return to its original tempo even if you are still holding the mouse button.

Hybrid Mode

Hybrid mode provides a blend of the CDJ and Vinyl control modes.

- Pressing Play/Pause to pause playback will cause audio to stop, just like in Vinyl mode.
- While paused, clicking and dragging on the Scrolling Waveform will have audible results, like scratching in Vinyl mode.
- When playback is active, clicking and dragging on the Scrolling Waveform will not stop audio. Instead, you’ll be able to drag left or right to offset the playback speed of the track like in CDJ mode. This will allow you to align the track against the other Deck when beat-matching.

⚠ *Switching to MIDI Platter Control Mode also selects Vinyl Mode, while selecting Hybrid Mode switches off MIDI Platter Control Mode. For more information about MIDI Platter Control Mode, refer to Chapter ??, “MIDI Platter Control.”*

Try out Hybrid mode:

1 Click and hold on the waveform. The music will continue to play.

2 While holding on the mouse button, drag the mouse left. The playback tempo will be momentarily increased, making the waveform scroll a little faster to the left.

3 Now hold and drag the mouse to the right. Playback will remain going forward, but the tempo will be slowed slightly, resulting in a waveform that still scrolls right to left, but at a slower rate.

Controlling the waveform in this manner while aligning the song with another deck is another example of “Nudge Via Waveform.” During this process, the Phase Grids for each song will become closer in line with each other as the synchronization between them improves.

As soon as you stop dragging, playback will return to its original tempo even if you are still holding the mouse button.

Control Inputs 1 Though 4

This option switches Torq to External Control Mode which lets you use the Torq Control Vinyl or Torq Control CD's, as well as other qualified hardware to provide the same method of DJing as traditional turntables and/or CD decks. Torq also allows you to use external MIDI hardware to control nearly any feature within the application.

The Control Vinyl and Control CD system works by using vinyl records and compact discs imprinted with special control signals. You’ll play these control signals on your turntables and/or CD players and feed that signal into any professional audio interface that has four inputs (with phono preamplifiers on each input if you are using turntables) such as the M-Audio Conectiv. Torq will listen to those audio signals and will use the encoded information to control the playback of the Decks.

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For detailed information about the connection, configuration, and use of qualified external control surfaces with Torq, refer to Chapter 13, "External and MIDI Control."

External Control

Pressing the External Control button located to the left of each Deck Mode drop down menu switches the deck to External Control Mode, which lets you control the desk using Control Vinyl or Control CD's as described above via Control Inputs 1 through 4. With this, the appearance of the play button will change, becoming two buttons. The top button, labelled ABS offers two different control modes, affecting the behavior of the Control Vinyl or Control CD and song playback. In it's default state the ABS button switch the deck to Absolute Mode button (see "Absolute Mode" on page 101), while pressing this button activates Relative Mode (see "Relative Mode" on page 102).

Immediately below the ABS/REL button is the "REL S." button (Relative Speed). When controlling multiple decks with a single control source, pressing this button activates Relative Speed Mode (see "Relative Speed Mode" on page 102) which regulates the turntable speed when switching between decks.

When using external Vinyl or CD control, Torq will preserve the pitch of the music even if you change the speed of the turntable or CD player. When you scratch, Torq will disable time-stretching and will re-enable it when you let the music play again. If you want Torq to respond like a true vinyl record, turn on the Key/Speed Lock button so that key and speed are locked together. You will then hear pitch changes when altering the speed of the turntable or CD player.

External Control can be configured in the Torq Preferences dialog as explained in Chapter 13, "External and MIDI Control."

Master/Sync

Auto Master Deck

By default this function is always active, and automatically chooses which deck is the Master Deck. The tempo and beat position of the Master Deck controls the tempo and beat position of any slave/synced deck. This means that all tempo based Torq functions and Looped samples will follow its tempo even if there are tempo changes (set with Tempo Anchors).

Pressing the AUTO button in the Torq tool bar deactivates Auto Master Deck.

?Question¿ Screenshot of Auto Button

Master Button

Clicking this button selects a Deck as the Master Deck and the Global Tempo will change to the tempo of the "new" Master Deck. With a Deck set as the Tempo Master, all tempo based Torq functions and Looped samples will follow its tempo even if there are tempo changes (set with Tempo Anchors) will follow the Master Deck.

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If you're using Torq Xponent as your controller with Auto Master Deck is switched off, it is possible to select a Master Deck by holding SHIFT and pressing the Sync button on a Deck. The Sync button will flash, confirming that the deck is the Master.

⚠ *If you are using Torq with qualified third party controller, refer to the documentation provided with your hardware for detail about the equivalent functionality.*

Sync Button

Clicking the Sync button automatically synchronizes a Deck to the Global Tempo. While Sync is active, the Deck is also affected by changes to the Global Tempo. For example, if you lower the Global Tempo, the other deck will also slow down. If you attempt to scratch or re-align the deck, Torq will automatically snap it back into alignment to match the phase of the Global Tempo.

When you deactivate the Sync button, the deck maintains the tempo setting allowing the song to play at the Global Tempo. However, Torq will no longer attempt to keep the Deck in sync if you make changes to it, such as scratching.

Nudge Buttons

?Question¿ screenshot of nudge buttons

If you're not taking advantage of Torq's ability to keep tracks aligned using Sync, you can do it manually using the Nudge buttons. If a song becomes ahead or behind the other, the Nudge buttons let you push the song back into alignment by creating a small change to the playback speed of the song. If the song is ahead of the beat, press the right Nudge button to slow it down. You'll see the waveforms of the two songs move in relation to each other. Release the Nudge button once the songs are aligned properly and the original playback speed will be restored.

The behavior of the Nudge buttons can be reversed in the Preferences if you prefer the song to speed up when pressing the right Nudge button.

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Speed Slider (SPEED)

?Question¿ Speed Slider Screen shot

Torq's Decks are each equipped with a Speed Adjust slider for the purpose of beat-matching songs. This slider behaves just like the pitch adjusters found on DJ turntables and CD players. As you move this slider, the neighboring ADJ display will show how much the song's speed is being altered (expressed as a percentage where 0% is the original speed of the song) and the BPM display will change to show the new tempo of the song.

For those not familiar with these controls, your first impression may be that the slider is working backward since the speed of the song will increase as you move the slider down on screen. However, this is the proper behavior for pitch controls found on DJ turntables and CD players. It makes sense if you consider the following:

The pitch adjust slider on a turntable is mounted flat on the surface of the turntable's housing. Therefore, when you use the slider, you either push it away from you or pull it towards you. When a song is going too fast, you push the slider away from yourself, just as if you put out your hand in a "slow down" motion. If you need the song to go faster, you pull the slider toward you, similar to how you would gesture towards yourself if you wanted someone to move quickly. After a few hours of practice, this "backward" response will feel natural.

⚠ *All tempo changes made on a designated Master Deck will also be applied to the Global Tempo.*

Speed Range (RNG)

By default, the range of the Speed Adjuster is +/- 8%. That means that if you move the slider to either of its extremes, you'll only get an 8% change in the speed of the song. To the left of the Speed Adjuster is a display showing the current range setting for the slider:

You can change the range of the Speed Adjuster by clicking on this range display. Each time you click, the range will advance to the next highest setting. The order is: 8%, 10%, 20%, 50%, then 100%. When you click the display again, the range will "wrap around" back to 8%. You'll only need to increase the range when you're trying to match two songs with very different tempos, or when you want to perform an extreme speed change as a special effect (especially effective when the range is set to 100%).

Most experienced DJ's will simply match the tempos of two songs by hand using the Speed Adjust slider, which is a perfectly acceptable method of matching songs (indeed, this is the way it's been done for decades). Since it requires a lot of practice to hear when one song is playing faster or slower than another, those new to DJing will benefit from some of the extra features built into Torq. Such features include automatic beat detection, BPM displays, scrolling waveform displays, and automatic synchronization.

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BPM Display (BPM)

?Question¿ Screenshot of BPM display

Tempo is a measurement of the speed of a song and is normally expressed as Beats Per Minute (BPM). As the BPM increases, the speed of the song increases. In order for two songs to be mixed together with their beats aligned, the two songs will need to be playing at the same tempo. This is why Torq decks are equipped with Sync Buttons and Speed Sliders. In the event that you are trying to mix two songs with different tempos (which happens more often than not), you will need to use the Speed Sliders or Sync Buttons to match the tempo of the new song to the tempo of the current song.

Automatic BPM Detection

Any time you load a new track into a Deck, Torq will analyze it and attempt to determine the tempo of the song. For most dance music, Torq will be able to determine the tempo accurately. Once scanned, the tempo of the song will be shown in the BPM display for the Deck, which is located just to the left of the Speed Adjust slider.

The Torq beat-detection system usually provides accurate results when set to default settings. However some types of complex music can confuse the software resulting in incorrect tempos. In these cases you can specify the type of music you'll be using in the Preferences menu. This limits the tempo range used by the beat-detection system and increases the accuracy of the function.

Be sure your selection matches the type of music you're trying to analyze. If you have "Drum & Bass" selected and attempt to analyze a trip-hop song, Torq will give you the wrong tempo. In this instance you can change the music type and re-analyze the song if needed.

The BPM value will change if you alter the speed of the song with the Speed Adjuster. This is extremely helpful when trying to synchronize two songs since you'll be able to match the tempos of the two songs just by matching the BPM values shown in the displays.

Flatten Tempo

When this button is pressed, this function analyzes the position of all Tempo Anchors and the speed of the music between each of them to come up with an average tempo. This lets you synchronize the other decks to the song.

This is useful when locking one or more of the other decks to a song that has a live drummer. For example, you have song on Deck A where the drummer tends to speed up right before a drum fill, and may get even faster during the choruses, only to slow back to the basic song tempo during the verses. On Deck C you have song with a more constant tempo because it contains programmed drums. Pressing the Flatten Tempo button on Deck 1adjusts the playback to a constant tempo based on the average speed calculated by Torq. An exception to this is when Deck A is synced to a Master Deck that is not playing a song with a constant tempo.

The Flatten Tempo button will be greyed out for decks which do not have Tempo Anchors set up on their songs.

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Divide Tempo

The first time you press this button the tempo of the current song will be divided by 1.5. If the song was detected as 120 BPM, it will now show 60 BPM (120 BPM ÷ 1.5 = 60 BPM). The second time you press this button, the division factor will stay the same (1.5) and the tempo changes to 40 BPM (60 BPM ÷ 1.5 = 40 BPM).

Multiply Tempo

The first time you press this button the tempo of the current song will be multiplied by 1.5 (the multiplication factor will be shown in the Tooltip). If the song was detected as 120 BPM, it will now show 180 BPM (120 BPM x 1.5 = 180 BPM). The second time you press this button, the multiplication factor will increase to 2. If the song had been detected as 120 BPM, it would now show 240 BPM (120 BPM x 2 = 240 BPM). The multiplication factor will continue to increase in 0.5 steps each time this button is pressed.

Manual Tempo Adjustment (ADJ)

As mentioned above, Torq can determine the tempo of most dance music. Some music, however, is too complex or not repetitive enough for Torq to detect the tempo with precision. Fortunately, you can help Torq to determine the proper tempo through a number of different methods. The appropriate method will be based on the type of tempo correction you're trying to achieve.

Tap Tempo

On rare occasions, Torq will determine an incorrect tempo that has no direct relation to the actual tempo (not a fraction or multiple). At times like this, you'll want to use the Tap Tempo feature to determine the tempo of the song while it plays.

To set the tempo using Tap Tempo:

1 While the song is playing, click on the BPM display with each beat that you hear.

2 The BPM display will update the BPM to reflect the timing of the taps you performed.

3 The more taps you provide, the more precise the calculation will become.

To revert to the automatically determined tempo, hold the Shift key while clicking on the BPM display. This will also clear any Tempo Anchors (see "Tempo Anchors" on page 48).

⚠ *Tap Tempo cannot be used if there are Tempo Anchors in a song.*

BPM Entry

If you happen to know the BPM of the song, you can manually enter it into the BPM display, thus overriding the tempo detected by Torq.

To enter BPM manually:

1 Hold the Shift key and double-click on the BPM display.

2 Type in a new BPM value from your computer keyboard and press Enter.

3 The new BPM will then be set for the song.

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If at any time you wish to revert back to the automatically determined tempo, hold the Shift key while clicking on the BPM display. This will also clear any Tempo Anchors if any have been created.

Tempo Anchors

Torq provides you with another alternative in the event that none of the above methods provide an accurate BPM for the song, or when a song contains tempo changes. Torq will allow you to create a custom tempo map for a song employing a feature called Tempo Anchors.

Refer to XXX for more information about Tempo Anchors.

Key

The Key Adjust is used to raise or lower the key (pitch) of a song without changing the tempo. This is useful when attempting to match the melodies of songs on different Decks during a mix, known as key-matching. You can adjust the key of a song with the Key Adjust buttons or by dragging the up or down on the Key Display.

Fine Tuning

To fine-tune a song's key:

1 Click and hold the mouse cursor over the Key Display number.

2 Drag the mouse up or down. The number will adjust in increments of one cent.

To reset the key transposition to 0, hold down the Shift key on your computer keyboard and click on either of the Key Adjust buttons' Key Displays. If you have adjusted the key in finer increments, the key will be reset to 0, however the fraction will remain. For example, if the key is 4.23, resetting will make it 0.23.

Key Lock

The Decks in Torq have the special ability to change the playback speed of the song without changing the pitch of the song (this is known as time-compression and time-expansion). This means you don't have to worry about music changing pitch as you beat-match. However, if you would like to disable this feature and essentially lock the Key and Speed of the music together, turn on the Key/Tempo Lock button. With this on, the music will behave like a regular vinyl record (slowing down the music will make the music drop in pitch).

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MIDI Slider/Knob Control

MIDI control of the Key Adjust is different from other controls in Torq. You can assign a knob or slider to the Key Adjust, or you can assign keys on your MIDI keyboard—the behavior of the Key Adjust is dependent on your control method.

To assign a MIDI slider or knob to Key Adjust:

1 Make sure that your MIDI keyboard or control surface has been properly installed and is configured to work with Torq. Please see chapter 6 for more information about configuring your external MIDI hardware to control Torq.

2 Right-click (CTRL-click, Mac) on the Key Display; it will turn red indicating that it's waiting for an assignment.

3 Move a MIDI knob or slider on your MIDI controller. This will automatically assign the knob or slider to the Key Adjust.

4 The Key will be adjustable in one-semitone steps.

MIDI CC value 64 equals + 0 semitones. This generally means when the knob or slider of your MIDI controller is at center position, the Key will be at 0.

To assign a MIDI button to Key Adjust:

1 Make sure that your MIDI keyboard or control surface has been properly installed and is configured to work with Torq. Please see chapter 6 for more information about configuring your external MIDI hardware to control Torq.

2 Right-click (CTRL-click, Mac) on the [+] Key Adjust button. It will turn red indicating that it's waiting for an assignment.

3 Press a button on your MIDI controller to assign it to the [+] Key Adjust button.

4 Right-click (CTRL-click, Mac) on the [-] Key Adjust button. It will turn red indicating that it's waiting for an assignment.

5 Press a button on your MIDI controller to assign it to the [-] Key Adjust button.

6 Now that your buttons are assigned, press the button assigned to [+]. The Key will move up one semitone.

7 Now press both buttons simultaneously.

8 The Key Adjust will return to 0.

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To control Key Adjust with your MIDI Keyboard:

1 Make sure that your MIDI keyboard or control surface has been properly installed and is configured to work with Torq. Please see chapter 6 for more information about configuring your external MIDI hardware to control Torq.

2 Right-click (CTRL-click, Mac) on the Key Display. It will turn red indicating that it's waiting for an assignment.

3 Press a key on your MIDI keyboard. This key will automatically be assigned as the "root key" of the Torq Key Adjust.

4 If you press a MIDI key that is 1 semitone ABOVE the root key, the Deck's Key will be changed to +1 (semitones).

5 If you press a MIDI key that is 2 semitones BELOW the root key, the Deck's Key will be changed to -2 (semitones).

6 The range of Key transposition is plus or minus (+/-) 12 semitones. This makes it possible to control the Key Adjust of all Decks using a single MIDI controller keyboard, as long as the keyboard has enough keys to make up four (4) octaves.

Torq allows notes from the same controller and MIDI channel to be used as long as the root keys are at least two octaves apart.

Effects (FX)

Torq includes 13 internal VST effects units, and offers support for qualified third party external VST effects. The Effects section of each deck lets you load up 5 (4 internal and 1 external) plug-ins at a time. This means you can use up to 20 effects (10 in Two Deck mode) within your mix at the same time.

Refer to Chapter XX "Effects" - for more information about using VST effects with Torq.

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Chapter 6: Waveform Display

One of the most prominent features of the Torq user interface is the Waveform display, located above the Mixer. Unlike the smaller Overview Waveforms found in each Deck, the Scrolling Waveforms only show a few seconds of the current song before and after the current play position. This lets you see the alignment and synchronization of the Decks, and providing other important information as explained in this chapter.

The song in Deck A is shown at the top of the Scrolling Waveform display, with songs on Decks B, C, shown immediately below. In Two Deck mode the Waveform Display shows the song loaded on Deck B in the top half with the song on Deck C below it. While the yellow Now Line in the Overview Waveform for each deck moves from left to right as a song plays, the Orange Now Line in the Waveform Display remains stationary as the Waveform moves.

?Question¿ Screen Shot of 4 Deck Display with four songs loaded

?Question¿ Screen Shot of 2 Deck Display with 2 Songs loaded

Information Shown on Display

Waveform

By looking at the audio waveform itself, you can see where the beats are in the song. These sharp hits (transients) typically look like long, thin spikes in the waveform. In the picture below, you can see the heavy bass drum beats of a song in the Waveform Display.

?Question¿ Images in this section without Phase Grid

Waveform display

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When the drums stop, you'll notice that the tall spikes go away. This is how you can tell if a breakdown or slow section of the song is approaching. This is also lets you see where the drums come back in.

Waveform display showing lower-volume audio

Phase Grid

?Question¿ Image of Wave form with Phase Grid

By default Torq superimposes a Phase Grid over the Scrolling Waveforms to indicate the location of the beats in a song. The thicker lines in the Phase Grid indicate the locations of the downbeats (beginning of each bar) in the music. Torq will attempt to position the Phase Grid in the proper location as part of the analysis when loading a song into a Deck, and uses the position of the Phase Grid to properly synchronize the song.

Hiding the Phase Grid

?Question¿ Hide Phase Grid Button here.

If you would like to turn the Phase Grid lines off, click the "Hide Phase Grid" button located above the waveform display (next to the zoom controls).

Zoom

Zoom controls

Torq lets you zoom in or out of the Waveform Display using the Zoom control found in the Tool Bar, by clicking the magnifying glass icon, and moving the mouse with the button held down.

When this is done the value will change in increments of 0.1of a second, allowing you to see as little one second or as much as 40 seconds of the waveform either side of the orange Now Line. Zooming in is useful for matching beats more precisely, while zooming out allows you to see how the Phase Grids for each song line up over a longer duration of time.

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Maximize Waveform View

?Question¿ Image of Max Waveform View button

Clicking the Maximize Waveform button located in the Tool Bar expands the Waveform Display so that it takes up the whole of the user interface, hiding all other Torq controls except the Tool Bar. This lets you view the waveforms in greater detail, and when used in conjunction with the Zoom control allows for increased precision when matching beats.

Marker Display

Whenever you set Loop Points, or Cue Markers within a song Torq places visual representations of them and their positions in the Waveform Display as described below.

Loop Points

Loop Points

The Loop Points of the song (set with the Loop In/Out buttons or the QuickCue buttons) will be shown on the Waveform. The looped area of the music will appear in a lighter shade compared to the rest of the waveform.

Cue Points

Cue Points

If you've used the Cue button or QuickCue buttons to place various Cue Markers in the song, you will see them here. The QuickCue markers have numbers attached to them (corresponding to the assigned QuickCue button) and the standard Cue Point appears as an red line.

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Tempo Anchors

In addition to its automatic BPM detection features, Torq provides you with another alternative for BPM matching that becomes an indispensable tool when working with songs that include tempo changes or fluctuations (Torq's automatic beat detection is designed to work with songs that have a constant tempo). Using Tempo Anchors, you can manually specify the location of beats within a song thus allowing Torq to follow the tempo of any song even if it speeds up or slows down in the middle. Editing Tempo Anchors is a more involved process and should therefore only be used in the event that none of the normal methods yield the proper results.

Tempo Anchors are edited within the Scrolling Waveform window and should be done at the highest zoom factor so you can place the Anchors accurately. Furthermore, this is more of an "off-line" process—you should prepare a song with Tempo Anchors before trying to play it to an audience. Torq will save the Tempo Anchors in the TQD file so that you will only have to do this once for any particular song.

Tap Tempo

In order to add Tempo Anchors to a song you will need to map a key such as the space bar or a button on your control hardware to the Tap Tempo function.

To map a key or button to the Tap Tempo function:

1 Choose the Deck that you want to use when adding Tempo Markers to a song.

2 Right click on the BPM display for the Deck.

3 Tap the key or controller button you are mapping to the Tap Tempo function.

Adding Tempo Anchors

To add Tempo Anchors to a song:

1 Load a song onto a deck and press the Play button.

2 Use the Tap Tempo feature to determine the approximate tempo while the song plays. The tempo will appear in both the Global BPM display in the Tool Bar, and the Deck BPM display. This is very important since this will get the Phase Grid close to the proper position leaving only minor edits for you to do later.

3 Stop the song and rewind back to the beginning.

4 Hold SHIFT and drag the Phase Grid so that the downbeat (the thicker white line) is aligned with the first visible beat of the song. This will ensure that the Phase Grid starts at the right location—you will only need to use Tempo Anchors to fix issues where the Phase Grid drifts out of alignment.

5 Click the Edit Anchor Points button in the Toolbar. The background of the Scrolling Waveforms will turn purple indicating that Anchor Edit is active.

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?Question¿ Image of Edit Anchor points button

Anchor Edit mode

6 Search through the song looking for places where the Phase Grid no longer aligns with the beats of the music. When you find one that is out of alignment, double-click it. The line will change from grey to green indicating that the grid line has been turned to a Tempo Anchor.

7 Now that the grid line has been converted to a Tempo Anchor, you can now move it left or right until it aligns with the beat. Simply click-and-drag the Anchor to set it to a new location.

8 Repeat steps 6 and 7 until all of the tempo anomalies have been corrected. When complete, every grid line and Tempo Anchor should visually align with the beats in the song.

9 Click the Edit Anchor Points button again to exit Anchor Edit mode. The Scrolling Waveforms will revert to their original color.

Now, when you play the song, it will play with a constant tempo (the tempo variations will be removed). Some will say that editing Tempo Anchors is more of an art than a science. Indeed, there are other techniques that can be used other than the steps listed above which will give the same results. As you edit more and more songs, you'll learn which techniques are best for various types of music. Here are a few other methods that can assist with Tempo Anchors:

Tap Tempo Anchors

If you use Tap Tempo when Anchor Edit is on, each tap will place a Tempo Anchor at that location. If you're working with a song that has lots of tempo changes (such as older music that was not recorded to a click track) this can be very advantageous. Just tap along with the music and the Phase Grid will be pretty close to where it needs to be. You can then manually adjust any of the Tempo Anchors that need it.

Use fewer Tempo Anchors

While you could surely turn every single grid line into a Tempo Anchor, this is usually not necessary. Often, long sections of a song will have a consistent tempo. In these cases, it's usually enough to place a Tempo Anchor at the beginning and another at the end of that section. All the grid lines will distribute themselves evenly between the Tempo Anchors.

Fixing corrupted audio files

From time to time, you may notice that a song seems perfectly in sync then suddenly falls out of sync. This can be due to corruptions within the audio file. Torq will skip over sections of data that are corrupted and will continue to play the remainder of the song. Every time Torq skips over corrupted data, it will make the Phase Grid look like it has shifted to the right. In cases like this, you can use Tempo Anchors to adjust the tempo only

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where the jump occurs. Simply make two Tempo Anchors— one right before the jump and one right after. Drag the second Anchor to the left until it is aligned with the beat. All of the grid lines to the right of the last Anchor will shift as well so the remainder of the song will then be in alignment (unless there is another corruption).

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Chapter 7: The Mixer

The Torq Mixer sounds and behaves just like a professional hardware mixer with the added advantage of being able to support all four decks. The layout instantly familiar to anyone who has used a mixer before, and it is capable of performing the same techniques utilized by DJ's on traditional hardware mixers.

?Question¿ screenshot of Whole 4 Deck Mixer Panel here...

Mixer Architecture

Before you start tweaking knobs and sliders on the Mixer, you should have a basic understanding of the components in the mixer and the signal flow between the components. Without this basic understanding, some controls may seem to be misbehaving or completely inoperative, only because you've unknowingly set another control to a conflicting position. Additionally, there are some terms you should get to know, as they will be used repeatedly throughout this User Guide.

When the mouse is moved over a knob, slider or button the name of the control is displayed in the lower edge of the Torq window.

Channels

?Question¿ Screenshot of all for channels only

In Four Deck mode the Mixer has four channels, one for each Deck labelled A,B,C, and D to correspond with their respective decks. When switched into Two Deck Mode decks B and C are available. While the signals from all Decks enters the same mixer, they remain on their respective mixer channels. This lets you to process each audio signal differently before mixing them together into a single output channel (which is what your audience hears).

Each Mixer channel has a dedicated set of controls as described below:

Line Input Button

?Question¿ screenshot of Line Input Button.

Next to each channel name (A, B, C, and D or B and C in Two Deck mode) is a Line Input button. Clicking this button will activate the line input for the corresponding channel. This lets you to send audio from an external audio source connected to your audio interface (for example a CD player or turntable) to the channel.

In order for Line Input to work you will need to assign audio channels to the Line Inputs in the Audio tab of the Preferences. See the Preferences section for more information on setting up these inputs.

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Gain/Mute

?Question¿ screenshot of Gain

This knob increases or decreases the volume of the incoming audio signal by as much as 12db. This lets you match the levels of the songs you're mixing together.

?Question¿ Mute button

The "G" button next to the Gain knob is the Mute button. Pressing this button will mute the incoming audio—resulting in a silent channel.

EQ/Kills

Each mixer channel is equipped with a 3-band EQ which lets you use each knob to control the levels of High (H), Mid (M), and Low (L) frequencies of the song being played. Turning them to the right boosts their respective frequency range, while turn them to the left decreases it.

Next each knob you will find a corresponding kill button. Pressing them completely removes their corresponding frequency from the audio signal. When all three have been pressed the signal is muted in the same way as if the Mute button (G) has been activated.

The EQ controls are used to (1) improve the sound quality of poorly recorded or produced songs, (2) assist in matching the overall frequency content of two songs, (3) add emphasis to the music by removing or isolating one or more of the frequency ranges, and (4) mix songs together in a "jigsaw" fashion by swapping the frequency ranges of two songs as they play together.

Old songs typically don't have as much bass as today's tracks. Therefore, you'll often use the Low EQ to boost the bass (low frequencies) of the old song to match the louder bass of a recent song. Without doing this, it may sound like the music gets quieter as you mix from the recent song to the older one.

Likewise, even tracks recorded within the same year can sound different from one another, even when playing at the same volumes. This is usually because one song will have stronger Mid frequencies compared to the other. If the bass parts in both songs sound like they're the same volume, you can use the Mid EQ to "turn down" the louder song until it more closely matches the quieter song.

DJ's also like to mix things up during their sets by adding their own manipulations to the songs they play. For example, a DJ might cut the High and Low frequencies from a track a few beats before the chorus of a song, then bring them back right when the chorus starts (the perfect job for Torq's High and Low Kill buttons).

When two songs are playing at the same time, you'll frequently find that the music sounds muddy. This is normally due to "un-complementary" bass content in the two songs. This can be as simple as the two songs being in different keys, or could occur if both songs have long, sustained bass notes. In order to clean things up, you can simply remove the bass from one of the songs with one of the Low Kill buttons. This will leave the bass from the other song in the mix, so it will still sound natural. When you're ready, press both Low Kill buttons at the same time. This will kill the bass in the first track while bringing in the bass from the other. This will sound like the bass part in the overall mix has changed (which it has) and the mix will still sound full. You can also swap frequencies with the other frequency bands. You can also make the swaps less abrupt by using the EQ knobs instead.

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PFL/Headphone Button

Once the audio signal leaves the EQ, it is sent to two different locations. One location is the PFL Button, which looks like a pair of headphones. PFL stands for Pre-Fader Listen, which refers to hearing an audio signal without being under the influence of the Volume fader (on some mixers, this function is called "Cue"). That definition may not make sense if you're not familiar with a mixer, so think of it as a way to privately hear the music in a mixer channel regardless of what your audience can or cannot hear.

This is what a DJ uses to listen to the next song before he plays it for his audience. When you press the PFL button, that channel is sent to the PFL/Headphone section (see "PFL/Headphone Cue" on page 60). This lets you use your headphones to hear how a mix will sound before your audience hears it.

Channel Volume Faders

Besides going to the PFL, the audio leaving the EQ also goes to the Channel Volume fader. This is the primary volume control for the channel (though it is subordinate to the crossfader) which works just like a volume fader on a traditional mixer. You can match volumes of the two tracks using the Channel Volume faders. However, some DJ's prefer the technique of leaving the Channel Volume faders fully up—you then match the volumes of the songs using the Gain knobs. The reason for this is that you're then free to use the Channel Volume faders for other effects such as volume fades, cuts, and stutter effects, similar to the scratch techniques used on the Crossfader. Whichever approach you choose is entirely up to you.

You can quickly return a Channel Volume fader to full volume by holding SHIFT and clicking on the fader.

Line Input Buttons

Located above the PFL icons in each channel of the Mixer is a Line Input icon. Clicking this icon will activate the line input for that channel. This will allow you to feed audio from an external audio source (such as a CD player or turntable connected to your audio interface) for mixing with Torq's Mixer. All functions, such as EQ, Gain, Effects, and PFL, will still work even when using external audio sources.

In order for Line Input to work you will need to assign audio channels to the Line Inputs in the Audio tab of the Preferences. See the Preferences section for more information on setting up these inputs.

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PFL/Headphone Cue

?Question¿ screenshot of 4 deck PFL section here...

?Question¿ screenshot of 2 deck PFL section down the right side

PFL stands for Pre-Fader Listen, which refers to hearing an audio signal without being under the influence of the Volume fader (on some mixers, this function is called “Cue”). That definition may not make sense if you’re not familiar with a mixer, so think of it as a way to privately hear the music in a mixer channel regardless of what your audience can or cannot hear.

Split Button

Clicking the Split button (headphone icon) sends the PFL signal from any Deck to the left side of your head phones while the signal your audience hears will be on the right side. This makes it easier for you to hear misalignments in rhythm and tempo.

Clicking the Split again switches off split mode and the PFL signal from a deck will be heard in both sides of your headphones.

Source Knob

The Source Knob lets you balance the levels between the PFL signal from a deck and the main mix with or without split mode being active. Turning it all the way to the left mutes the Main Mix leaving your with just the PFL signal in the left side of your headphones. turning it all the way to the right mutes the PFL signal leaving the main mix signal in your headphones.

Volume Knob

This knob (slider in Two Deck mode) controls the overall volume of the PFL section in your headphones.

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Hide Mixer

?Question¿ screenshot of Hide Mixer View Button

In both Four Deck and Two Deck modes the mixer can be hidden by clicking the Hide Mixer View button located in the Torq Tool Bar. This can be useful in various situations, such when you are using an external mixer, or when you want to enlarge the browser.

Whenever the Hide Mixer View button is pressed, the Effects Racks move from their respective decks to the center of the center of the Torq interface beneath the Waveform Display. However, instead of four racks there will be two. In Four Deck Mode, each rack has four buttons on the left side labelled A, B, C, and D to correspond with each deck. In Two Deck mode, the will be two buttons labelled B and C. In either mode, pressing any of these buttons lets you accesses the Effects Rack for their respective Deck, and the appearance of the rack will change to reflect the current effects units and their settings. Aside from these differences, the Effects Racks, will continue to function as described in Chapter 8, “Effects.”

?Question¿ screenshot of 4 deck Torq GUI with mixer hidden

?Question¿ Screenshot of 2 deck Torq GUI with mixer hidden

Crossfader

?Question¿ screenshot of crossfader here.

The Crossfader lets you to fade between two audio signals. When the Crossfader is in the middle position, you will hear both decks that are sent to it. If you move the Crossfader all the way to the left, you will only hear the audio from the Deck assigned to that side. Similarly, if you move the Crossfader all the way to the right, you will only hear the Deck assigned to the right side.

⚠ *The Torq Crossfader has been designed to be very quick and responsive. However, if you are only using a mouse to control Torq, you probably won't be able to use the Crossfader for more than fading between songs. If you want to use the Crossfader for cuts and scratching, we recommend using a qualified M-Audio or third party hardware controller. A current list of qualified hardware controllers can be found on our website: www.avid.com.*

Crossfader Curve

The Crossfader Curve knob set the rate at which the songs fade in and out as the crossfader is moved from one side to the other. By default, the Crossfader knob is set to the twelve o'clock position or halfway between the two extremes.

Turning the knob all the way to the left sets the Equal Power Contour, which is good for slow fades between two songs. As you move the fader from the edge toward the center, it will slowly fade in one song. However, as it is fading in this song, it will also start fading out the other song. The end result is that the overall volume remains the same as you fade, even when both songs are playing at the same time.

When the knob is turned all the way to the right, Crossfader is set to the Hard Cut curve. This shape causes a song to fade in to full volume almost immediately after moving the fader inward from the edge. Similarly, the other song will not begin to fade out until the crossfader is almost all the way at the other edge. Then, right before the crossfader reaches the edge, the other song will fade down. This is the shape preferred by scratch DJ's as they can cut in a track to full volume with very little motion of their hand. When performed quickly, you don't even hear the volume fade up and down—it sounds as if the sound is being abruptly cut in and out.

Input Assign Buttons

By default, in Four Deck Mode Deck A is routed to the left side of the Crossfader while Deck B is routed to the right. However Torq lets you assign any of the four decks or a combination of decks to either side by clicking the Deck Buttons located at both end of the Crossfader. The buttons for any unassigned decks will be grey but they will change color as soon as they are clicked.

In Two Deck mode the default input assignment routes Deck B to the left side of the Crossfader while Deck C is assigned to the right. Either deck can be re-assigned using the B and C buttons at either end of the Crossfader. The button for an unassigned deck will be grey, but the button will change color as soon as it is clicked.

In both Four Deck and Two Deck Mode you can click the button for an assigned deck to cancel the current input assignment. However if the deck is playing a song when you do this, the signal will by pass the Crossfader and go straight to the Main Out to be heard by the audience.

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Crossfader Invert

?Question¿ screenshot.

This button lets you swap the assignments so that a deck routed to the one side of the Crossfader will be switched to the other. For example, if you have Deck B routed to the left side of the Crossfader and Deck C on the right, clicking this button reverses the routing so that Deck D is heard when the Crossfader is moved to the right and Deck C is heard when it is moved to the left. This is sometimes known as “hamster style” control.

Crossfader PFL/Headphone

?Question¿ screenshot

Clicking this button diverts the audio signal from the Master Output to the Crossfader to the PFL/Headphone cue. This let’s you preview your mix before your audience hears. Clicking this button a second time, sends the signal back to the Master Output and your mix will be heard by everyone in the room.

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Traq Morph

Traq Morph lets you perform crossfades with various and sometimes dramatic characteristics. This function is switched on as soon as you press one of the four Mode buttons described below. With Traq Morph switched off the Crossfader performs normal volume-based transitions for one deck to the other.

The Direction Button

?Question¿ screenshot

Each Traq Morph mode is directional and you can use the direction button to determine which deck the crossfade effect is applied to. Selecting the direction also determines which track will be the source of the morphing characteristic.

If for example, you have songs on Decks B and C with the Crossfader set all the way over to Deck B, pressing a Morph Mode button (Mph) followed by the direction button sets Deck B as the source. In this instance, when the Crossfader is moved toward Deck C the second song will adopt the sonic characteristics of Deck B.

Traq Morph Modes

Traq Morph offers four crossfade modes as described below.

Filter

?Question¿ screenshot

This mode lets you perform a tonal crossfade by simultaneously sweeping the frequency range of both tracks. You can choose the either of the following tonal characteristics from the Traq Morph Filter Style pop-up menu on the Behavior Preferences page (see Chapter 14, “Torq Preferences”).

Low - High (Default)

This mode places a High-Pass filter on the source Deck and a Low-Pass Filter on the second Deck. Both filters are set at the same Cutoff Frequency in order to cover the all of the available frequency range. However, the Cutoff Frequency is changed according to the position of the Crossfader.

Mid

The Mid setting places a Mid-Pass filter on the source Deck and a Mid-Cut filter on the second Deck. This defines a Mid-Band characteristic with a center frequency of 1 kHZ that is cut from the source Deck and passed to the second Deck. The width of the Mid-Band is controlled by the Crossfader.

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Duck

?Question¿ screenshot

Duck mode lets you create a “seamless” crossfade that does not layer one track over the other like a conventional crossfade. This is done using either a frequency based or volume based “ducking” effect. This lowers the perceived volume of the first track at the very moment the crossfader reaches the transition point between two audio signals. The overall effect is the both tracks will sound like one continuous song.

You can choose the either of the following settings from the Traq Morph Duck Style pop-up menu on the Behavior Preferences page (see Chapter 14, “Torq Preferences”).

Band - Duck (Default)

As the Crossfader is moved from one deck to another Torq locates the loudest frequency of the second song and gradually attenuates, or lowers the same frequency in the first song. For example, let’s say you have songs on Decks B and C with the Crossfader set to Deck B, and the loudest frequency in the signal from Deck C is 240 Hz. In this instance, the volume of the song on Deck B will gradually decrease at 240 HZ, as the Crossfader is moved towards Deck C.

Standard

This setting lowers the volume of the first Deck across the whole frequency range as the Crossfader moves towards the second Deck.

Cut

?Question¿ screenshot

This mode lets you perform crossfades while rhythmically cutting between two decks. These settings are useful when mixing Techno or House music, especially if the songs have short (1 bar or 2) looped sections.

You can choose from the following settings from the Traq Morph Cut Style pop-up menu on the Behavior Preferences page (see Chapter 14, “Torq Preferences”).

1/8 - 1/8 (Default)

This cuts between songs in an 1/8 note rhythm where the source Deck is heard on the first 1/8 note while the other Deck plays is heard the second 1/8 note, otherwise known as the off-beat.

1/16 - 3/16

This setting cuts between songs in a 1/16 note rhythm where the source Deck is heard on the first 1/16 note of each beat while the other Deck plays is heard the on the following three 1/16 notes.

1/6 - 16

This setting cuts between songs in a 1/16 note rhythm. The difference here is that Torq alternates between the signals source Deck is heard on the first 1/16 note and third 1/16 note of each beat while the other Deck plays is heard the on second and fourth 1/16 notes of each beat. Cutting in this manner is best for mixing songs with a strong 1/16 note feel, such as Trance or Drum n’ Bass.

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Triplet Mode

?Question¿ Screenshot of button.

Clicking the Triplet mode button in the Torq Tool Bar activates Global Triplet mode. In this mode the timings of the cuts will be adjusted so that they will retain their “musicality.”

Morph (Mph)

?Question¿ screenshot

Morph mode lets you perform a crossfade where one track is made to sound a close as possible to another. This mode is useful when mixing a song the source Deck that is very rhythmic with a song on the second Deck has a lot of bright sounding keyboard pads. Mixing in this manner causes the pad to adopt rhythmical characteristics that are not in the original recording.

You can choose the either of the following settings from the Traq Morph Style pop-up menu on the Behavior Preferences page (see Chapter 14, “Torq Preferences”).

Strong (Default)

The Strong setting places a 24db filter on a deck which makes the audio signal sound louder and enhances the modulation of the morphing.

Gentle

This setting is more subtle, as it does not increase the volume or exaggerate the modulation the morphing.

Traq Morph Pre-listening

While Traq Morph is active you can hear what your crossfade will sound like before the audience does by temporarily routing the Crossfader signal to PFL channel. This help avoid sudden and sometimes drastic volume changes.

To pre-listen to a Traq Morphed crossfade

1 Move the Crossfader all the way to the right or left depending on which deck you want to hear first.

2 Press the Crossfader PFL/Headphone button to send the signal to the PFL channel.

3 Press one of the Morph Mode buttons.

4 If necessary choose one of the related Mode Preferences from the Preference dialog.

5 Perform the crossfade to hear how it will sound.

6 If necessary, change the Mode Preferences, and perform the crossfade again.

7 Press the Crossfader PFL/Headphone button again to route the signal back to the main output.

8 Perform the crossfade for your audience.

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Main Out Section

?Question¿ screenshot of Main Output section here.

The Main Out section controls main mix heard by your audience and features an audio recorder for recording your performances, as well as a Limiter.

Volume Control

The Main Out knob controls the overall volume of Torq's Main Outputs. It is also used for setting the level of the Torq Recorder. Turning the knob to the right increases the output volume while turning to the left decreases it.

Level Meter and Limiter

Since Torq is a digital audio system, it has a limited amount of headroom (dynamic range). Whenever your mix exceeds the headroom, clipping (distortion) normally occurs. To prevent this undesired sound, Torq features a Limiter on the Main Output which will keep the signal from clipping.

It does this by quickly reducing the volume any time the Master Volume exceeds the maximum headroom. However, you want to be sure the limiter isn't being triggered all the time. In this instance, the limiter will reduce the volume all the time, and this will sound strange. If this happens, down the Main Out knob so your mix doesn't constantly activate the limiter, and increase the volume on the house sound system to make up for any reduction in output volume.

Main Out Recorder

The Main Out Recorder lets you record your performances as an audio file. You can then burn the recording onto a CD or distribute it as a Podcast or mp3. The duration of your recording is displayed in the digital counter just below the Record button.

Recording a mix performed in Torq involves setting a filename and location where the file will be saved, setting the recording level, and recording your performance as described below

Filename

To set the filename for your recording:

1 Click the Record button. A dialog box will open.

2 Select the destination folder for your recording, and type a name.

3 Press enter. The dialog box will close.

The sample rate of the recorded file will match the sample rate currently selected in the Audio tab of the Preferences.

Refer to Chapter 14, "Torq Preferences" for more information about setting the sample rate and other audio preferences.

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Setting the Record Level

The Main Out volume knob controls the level of your recording. Set volume as high as possible without constantly triggering the limiter (it's OK if you trigger the limiter every once in a while). Setting the Main Out volume too low, will result in a recording that is too quiet.

⚠ *Changes made to the Master Out volume will be committed to your recording, even while you're in the middle of your mix.*

Recording

Once you have set the filename and recording level, you can begin recording.

To start recording:

1 Click the Record button. It will light up to indicate that recording has commenced. You'll also see the Record Time window begin to count the length of the recording.

2 Perform your mix as normal.

Press the Record button again to stop the recording and save the file.

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Chapter 8: Effects

Effects are devices that alter an audio signal. These alterations can range from subtle to extreme and can be a great source of creative fun within Torq.

Each Deck can be processed individually with multiple effects. When the Mixer is not hidden (see “Hide Mixer” on page 60), the Effect Racks are located at the bottom of each Deck. Torq lets you load up to four built-in library effects one external VST effect for each Deck. In Four Deck Mode, this means you can use up to twenty effects within your mix at the same time, while Two Deck Mode lets you use up to ten.

When the mouse is moved over a knob, slider or button the name of the control is displayed in the lower edge of the Torq window.

?Question¿ Image of Four Deck FX Rack.

?Question¿ Image of Two Deck FX Rack

Controls

The controls for the built-in and external VST effects are basically the same and will be described here. However, VST effects have some additional controls and considerations of which to be aware of, and these are covered in “VST Effects” on page 81.

Effects Slots

To begin using effects, you need to load and effect into one of the Effect Slots.

To load an effect:

1 Click on an empty Effect Slot. A pop-up menu of available effects will appear.

2 Click on one of the effect names from the list to load it into the slot. The name of the effect will appear in the Effect Slot. By default, the Enable button for the slot will change from grey to the corresponding Deck color to signify that the loaded effect is active.

⚠ *When the Reverse effect is loaded the On/Off button for the Effects Slot will remain grey, because the Reverse effect is always on. See “Reverse” on page 78.*

3 To remove an effect, choose the “blank” effect at the top of the pop-up list.

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Bypass Button (BYP)

?Question¿ Image of Bypass button

This activates and deactivates an Effect Rack. Because the effects are generally already switched on when loaded, bypassing an empty Rack lets you load an effect or previously saved Effects Rack setup with out unwanted changes to your mix.

When using multiple effects at the same time, you may want to turn them on or off all at once (instead of clicking each effect's Enable button). Clicking the Bypass button at the top of the Rack sends audio directly to the Mixer, and the effects are no longer heard. Click the button again to disengage the bypass.

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Enable Button

?Question¿ Image of Enable Button

The Enable Button switches an effects on or off. By default, this button will be on whenever you load a new effect. This allows you to set the effect the way you desire before you use it in your mix.

> *Some of the effects don't utilize the Enable button and will function in a different way (which is outlined in the various effect sections later in this manual).*

Amount Knob (AMT)

?Question¿ Image of AMT knob

The functionality of the Amount knob differs depending on the status of the Routing button:

- When the Routing Button is set to Insert/Chain—the Amount knob will adjust the wet/dry mix of the effect. When the Amount knob is all the way to the left, only the original audio signal will be heard (no effect). When the Amount knob is all the way to the right, only the output of the effect will be heard, thus becoming a full insert effect. When the knob is at 12 o'clock, an even 50/50 mix of dry signal and wet effect will be created.
- When the Routing Button is set to Send—the knob will act as an effect send amount. When the Amount knob is all the way to the left, the signal is not sent to the effect. As you begin to rotate the Amount knob clockwise, the signal is sent to the effect, and you will begin to hear the results of the effect in your mix.

⚠ *When used as a Send control, turning the Amount know all the way to the right boosts the effect output, making it louder than the "dry" source signal.*

Routing Button

When using effects, there are basically two different configurations that can be used: Insert and Send. An Insert Effect is placed between the Deck and the Mixer. The audio from the Deck can be fully processed and replaced by the effect. Examples of effects that are typically used as inserts include Distortion, Dual-Filter, Phaser, Flanger, Repeat, Strobe and Reverse.

?Question¿ Image of Routing Button (Insert mode)

A Send Effect blends the sound of the effect with the original music. The effects that are typically used as Sends are Reverb and Delay. When using these effects, you typically want to add Reverb or add a Delay to the music that is already playing. Therefore, think of Insert Effects as replacing your sound, and Send Effects adding to it.

?Question¿ Image of Routing Button (Send mode)

Each time you click the Routing Button, it will toggle its state between Insert and Send. When loading an effect, Torq will automatically set the Routing Button to the mode most appropriate for the effect (i.e. the Reverb will be loaded in Send mode while the Dual-Filter will be loaded in Insert mode).

~~In Torq 2.0, it is now also possible to create Chains with the Send Effects. This allows you to take the output of the Send Effect and process it further with more Insert Effects. For example, you can take the output of the Delay and feed it through the Phaser to create psychedelic echo patterns.~~

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~~A Chain will automatically be created when you place an Insert Effect below a Send Effect in the rack. Instead of seeing the normal Insert icon, you'll see a Chain icon indicating that the effect is chained to the one above it. This indicates that the effect is taking its audio from the output of the effect above it.~~

With this new effect routing, it is only possible to create an Insert Effect if the Effect is placed above any other Send effect in the Rack. All Insert Effects placed below a Send Effect will be chained to that Send Effect. Also, when using Chain mode, the output of Send effects will be sent to the Crossfader, meaning that the tail ends of effects (such as delays and reverbs) will still be heard after turning down the Channel Volume fader. However, moving the Crossfader away from the channel will silence both the music and the effects.

Tweak Knob

?Question¿ Image of Blank Tweak knob

Effects are fun because you can alter their qualities while you use them, such as changing the length of a Reverb or Delay, or to change the intensity of a Phaser or Flanger. To keep things simple and easy to manage, Torq provides one knob, the Tweak knob, for parameter control on each effect. Because effects alter audio in different ways, the function of this knob will change, and is labelled depending on the effect loaded in the slot.

Tweak Button

The Tweak button works in the same way as the Tweak knob—it will toggle the state of a parameter in the selected effect. Like the Tweak knob, the exact function of the Tweak button depends on the effect you're using.

Saving Effect Racks

?Question¿ Image of Save button

You can save the entire state of an Effect Rack, including the effects used and their settings, using the Save button at the top of the Rack.

To save an effects rack:

1 Configure your Rack as desired and click the Save button in the upper right area of the Rack. A standard Save dialog box will appear.

2 Type a name for the file and choose a location on your hard drive to store it and click Save (Mac) or OK (Windows). The file will be saved as a preset, containing all information regarding the Effect Rack configuration.

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Loading Effect Racks

Previously save Rack settings are loaded as described below.

To load an effects rack:

1 Click the Load Rack button. A standard dialog box will appear.

2 Browse to the location on your hard drive in which the Effect Rack configuration file is stored, select the file, and click Open (Mac) or OK (Windows). The file will load all Effects in your Rack configuration exactly as you saved them.

3 Loading an Effect Rack discards all effects currently in the Rack. If you have a combination you like, make sure to save it before you load in another configuration.

Clearing all Effects

To clear all effects in a rack, hold the Shift button while clicking the rack's Bypass button.

Built-In Effects

The following is an explanation of the 10 built-in effects in Torq:

Compressor

?Question¿ Is there any info about this?

Delay

Delay icon

Delay is the technical term for what the Delay effect does, but you'll probably like to think of this effect as an "echo." Essentially, the Delay effect listens to the incoming audio, holds on to it for a predetermined amount of time, then spits it back out. When the Delay output is blended in with the audio, it sounds like an echo. Furthermore, you can feed the Delay output back to its input again, causing echoes of the echoes (also known as Feedback).

DJ's typically use Delays to fill up space during a break in a song (the last couple of beats before the break can be echoed) or to stretch out the ending of a song by letting it echo and slowly fade away. Because of the tempo-synced nature of Torq's Delay effect, you'll also be able to add rhythmic variance by layering echoes that are perfectly timed to the music.

Enable Button

Deactivating this button stops the Delay effect. The output of the Delay will stop immediately when the effect is turned off.

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Amount Knob / Routing Button

When the Routing button is set to "Send," the Amount knob will control the amount of audio from the Deck to feed into the Delay. When the knob is fully counterclockwise, no signal will be sent into the Delay so you will not hear any echoes. As you begin to turn up the Amount knob, you'll begin to hear the echoes from the Delay.

When the Routing button is set to Insert, turning up the Amount knob will cause the output of the Delay effect to replace the sound from the Deck. This is a subtle difference that won't be noticeable until you do one of the following:

- When you turn the Amount knob beyond its 12 o'clock position, the sound from the Deck will begin to fade away, leaving only the sound of the Delay.

  – or –

- If you quickly turn the Amount knob back to 0, you will cut off any remaining echoes before they can be heard.

The Delay effect will load with the Routing button set to Send mode since this is the typical routing for a Delay.

Tweak Knob

Use this button to change the Delay time of the effect. The Delay's time will be set to match the rate at which you tap this button. The maximum delay time is two bars and the minimum time is 1/16-note (1/16 of a bar). The operation of this button is governed by a few rules:

- When fully counterclockwise, feedback will be disabled.
- When the knob is turned up to three quarters of the maximum, the feedback will be 100% (i.e. the delay will never fade away).
- When the knob is turned past three quarters, the feedback will be increased beyond 100%, allowing the delay to get louder with each time it is repeated.

Tweak Button

Use this button to change the Delay time of the effect. The Delay's time will be set to match the rate at which you tap this button. The maximum delay time is two bars and the minimum time is 1/16-note (1/16 of a bar). The operation of this button is governed by a few rules:

- Torq will determine the tempo within only two taps. This allows you to change the delay time very quickly, even while the Delay is already active.
- Since Torq knows the tempo of the song playing on the Deck, the delay time you tap using the Tweak button will automatically be adjusted to match a note value at the current tempo. For example, if the song BPM is 120, and you tap a tempo that is interpreted as 122 BPM, the delay time will be set to 120 BPM (quarter-note delay). If you tap a tempo that is read as 158 BPM, the delay tempo will be rounded up to 160, which is a dotted-eighth.

Reverb

Reverb icon

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Reverb is the phenomenon in which sound bounces off the walls within a room, creating hundreds (thousands?) of echoes that cannot be individually identified by the human ear. The total result of all these echoes is a wide and ethereal sound that can add a nice touch of space to your mix.

The most obvious characteristic of a Reverb is how long it lasts. This is referred to as the Reverb Time and is the only adjustable parameter in Torq's Reverb effect.

Enable button

This button enables and disables the Reverb effect. If this button is switched off while the Reverb is active, the sound of the Reverb will be cut off.

Amount Knob and Routing Button

When the neighboring Routing button is set to Send mode, the Amount knob will set the amount of signal fed into the Reverb processor. This signal will then be blended with the original signal from the Deck, making it sound like the Reverb was added to the song.

When the Routing button is set to Insert mode, the Amount knob will adjust the Dry/Wet balance of the Reverb. The difference is that the audio generated by the Reverb will replace the original song as you turn this knob up.

By default, the Reverb effect will load with the Routing button set to Send mode since this is the typical way to use a Reverb. However, feel free to experiment with Insert mode—you can create ambient textures that can be interesting to blend into your mix.

Tweak Knob

This knob controls the Reverb time. When fully counterclockwise, the Reverb will be extremely short, similar to the sound heard in a small shower stall. As you turn this knob clockwise, the Reverb will become longer until it sounds similar to a huge cathedral.

Tweak Button

Pressing this button will "freeze" the Reverb. When activated, the Reverb will stop accepting audio input from the Deck and will feed back on itself instead. The result is a reverb that "hangs" or "stalls" indefinitely. When you turn Freeze off, the Reverb will begin accepting input signals again, and the current "frozen" reverb will fade away following the current Reverb Time. This can be another interesting way to fill up space during a break or to add emphasis to a hit in the song.

Flanger

Flanger icon

A Flanger is a common effect found in most effect processors. Flanging grew from a studio trick where engineers would play identical material on two tape decks, then make slight changes to the play speed of the two tape machines by dragging their hand on the flanges of the tape reels. The result is a "whooshing" sound that can be compared to a jet fly-over.

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Enable Button

Naturally, this button turns the Flanger on and off.

Amount Knob and Routing Button

Unlike the two effects discussed so far, the Flanger works best with the Routing button set to Insert mode. This allows you to completely replace the original audio signal with the flanged version (by turning this knob fully clockwise) in order to emphasize the effect.

The effect will still work in Send mode, but it will be less pronounced.

Tweak Knob and Button

The function of the Flanger's Tweak knob is determined by the state of the Tweak button:

- When the Tweak button is off, the Flanger will be in Manual mode. The Tweak knob will then control the delay time of the Flanger. When the knob is counterclockwise, the Flange effect will be very tight. As the knob is turned clockwise, the effect will become more dramatic and metallic in nature.
- If the Tweak button is on, the Flanger will be in Automatic mode. In this mode, the delay time for the Flanger will be adjusted automatically. The Tweak knob will then set the rate of the automatic adjustment—turning the knob clockwise will increase the modulation rate.

Phaser

Phaser icon

A Phaser is a somewhat mellower version of the Flanger. Like the Flanger, a Phaser works on the principle of mixing two identical audio sources together. However, unlike a Flanger, the timing difference between the two audio sources is very small. The result is that some of the frequencies in the song will be removed or "cancelled out." Some people describe this sound as a "wind tunnel" effect.

Enable Button

This button will turn the effect on and off.

Amount Knob and Routing Button

Like the Flanger effect above, the Phaser works best with the Routing button set to Insert mode. This allows you to completely replace the original audio signal with the phased version (by turning this knob fully clockwise) in order to emphasize the effect.

The effect will still work in Send mode, but it will be less pronounced.

Tweak Knob and Button

The function of the Phaser's Tweak knob is determined by the state of the Tweak button:

- When the Tweak button is off, the Phaser will be in Manual mode. The Tweak knob will then control the phase of the effect.
- If the Tweak button is on, the Phaser will be in Automatic mode. In this mode, the phase will be adjusted automatically. The Tweak knob will then set the rate of the automatic adjustment—turning the knob clockwise will increase the modulation rate.

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Resonator

?Question¿ Is there any info available for this?

Dual-Filter

Dual Filter icon

A coffee filter is designed to stop coffee grounds while allowing water to pass through. Audio filters work in a similar fashion: they prevent particular frequency ranges within an audio signal from passing through the effect. Filters come in a variety of flavors and Torq features three of the most popular types: Low-Pass, High-Pass, and Band-Pass. The names of these filters are descriptive of what they do. A Low-Pass filter, for example, will only allow low frequencies (bass tones) to pass through—it will remove the high-frequency (treble) content from the audio signal. A High-Pass filter works the other way: it allows the treble to pass through while bass is removed. A Band-Pass filter is essentially a High- and Low-Pass filter put together: it will remove high and low frequencies from the audio signal, only allowing a narrow band of frequencies to pass.

The most important parameter for a filter is its Cutoff Frequency. It determines the frequency where a filter will begin to stop frequencies. For example, when using a Low-Pass filter with a cutoff frequency of 1kHz, frequencies below 1kHz will pass through the filter unaffected while the frequencies above 1kHz are reduced or removed. While there are other parameters that also affect the behavior of a filter, Cutoff Frequency is the parameter that you'll be controlling in Torq.

Enable button

This button will turn the Dual-Filter on and off.

Amount Knob and Routing Button

The Dual-Filter is designed to be used as an Insert effect. For this reason, the Routing button will automatically switch to Insert mode whenever you load this effect. Then, the Amount knob will serve as a Dry/Wet adjustment which you will want to leave fully clockwise (so you only hear the output of the Dual-Filter).

Tweak Button

The Tweak button is used to set the filter mode for the Dual-Filter effect. When this button is off, the two filters (High-Pass and Low-Pass) will be adjusted only one at a time. When you turn this button on, the High-Pass and Low-Pass filters will be linked, thus creating a Band-Pass filter where both filters are adjusted simultaneously.

Tweak Knob

This knob will adjust the Cutoff Frequencies of the filters.

When the Tweak button is off, the knob will behave as follows:

- Placing the knob at 12 o'clock will result in the audio passing through the Dual-Filter unaffected.
- Turning the knob counterclockwise from 12 o'clock will begin to lower the Cutoff Frequency of the Low-Pass filter. You will hear the music become dull and muffled as you turn this down to the point where you'll only hear low bass rumbles.

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- Turning the knob clockwise from the 12 o'clock position will begin to raise the Cutoff Frequency of the High-Pass filter. You will hear the music become more thin and brittle as you do this until only the highest of the high frequencies remain.
- When the Tweak button is on, the Tweak knob will merely control the center frequency of the Band-Pass filter. As you turn the knob down (counterclockwise), you'll hear the high frequencies become muffled while you begin to hear more of the bass.

Distortion

Distortion icon

Distortion, by definition, is the altering of a signal. In practical terms, it refers to feeding audio into a device so loudly that it exceeds the dynamic range of the device. The result is a fairly raunchy noise that, at times, can be exactly what you're looking for. This is known as Overdrive Distortion, and is one of the two types of distortion possible with the Distortion effect.

The other type of distortion available in Torq is Sample Rate Reduction. When an audio file has its sample rate lowered, it loses the ability to accurately reproduce high-frequency sounds. Instead of sounding soft and muffled like a Low-Pass filter, the Sample Reducer will sound grainy and harsh.

Enable button

This button turns the Distortion on and off.

Amount Knob and Routing Button

Like the Dual-Filter above, the Distortion is designed to be used as an Insert effect. The Routing button will switch to Insert mode automatically any time you load the Distortion effect. You should also turn the Amount knob fully clockwise so that you can only hear the output of the distortion (if you blend the distorted signal with the original signal, the distortion will be less pronounced).

Tweak Button

This button is used to set the operating mode of the Distortion. When the button is off, the Distortion is in Overdrive mode. When the button is on, the Distortion will be in Sample Rate Reduction mode.

Tweak Knob

When set to Overdrive mode, the Tweak knob will increase the volume of the signal being fed into the distortion. When the knob is fully counterclockwise, the input signal is not boosted and therefore un-distorted. As you turn this knob clockwise, the volume will begin to increase. At a certain point, you'll start to hear the audio become distorted. You can leave the knob here for a subtle distortion, or you can continue to turn it clockwise in order to push the distortion into really nasty realms.

When set to Sample Rate Reducer mode, the Tweak knob will control the output sample rate. When the knob is fully counterclockwise, there is no sample rate reduction, so the audio will be un-distorted. As you turn the knob clockwise, the sample rate will be lowered. The high frequencies will be the first to exhibit signs of distortion. As you continue turning the knob, the distortion will move lower and lower into the frequency range of the audio until all that remains is low-sample junk.

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Beat Reverse

Beat Reverse lets you create the impression that the drum or percussion parts of a song were recorded backwards.

Enable Button

Turns Beat Reverse on and off.

Strobe

Strobe icon

Just about anyone who has been to a dance club in the last 20 years has experienced a strobe light. Those are the super-bright lights that flash really quickly. They have the effect of making everyone look like they're in "stop motion" because the flash is so fast that you can't see movement anymore.

Torq's Strobe effect will create a similar stop-motion effect, but it will do it to audio. The Strobe will essentially mute and unmute the audio at a rate that you can control. The rate can be as slow as one bar (2 beats un-muted followed by 2 beats muted) or as fast as 1/64-note.

Enable Button

Turns the Strobe effect on and off.

Amount Knob and Routing Button

Because the Strobe effect is designed to mute the audio from a Deck, it needs to be used as an Insert effect. Therefore, the Routing Button will be set to Insert mode whenever you load this effect. The Amount knob will control the Dry/Wet mix of the effect. In use, this will control the depth of the Strobe effect. Since the Strobe effect is muting the signal that passes through it, setting the Amount knob at 50% will result in 50% of the signal still being present whenever the Strobe is muting. Therefore, you can use this knob to adjust the intensity of the Strobe.

Rate Knob

This knob changes the rate of the Strobe. A tooltip will appear whenever you adjust this knob to show the current rate (expressed in note values).

Tweak Button

Activating this button reverses the behavior of the Strobe, so that what was muted is un-muted and vice versa.

Reverse

Reverse icon

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Reversing the playback direction of a song is a useful technique for adding emphasis to certain sections of a mix. The traditional method for reversing playback is to actually reverse the rotation of the turntable. This has a couple of inherent problems.

First, the turntable can't change direction immediately as it must slow down to a stop then speed back up in the opposite direction. This can make reversing playback seem sluggish. Additionally, if the song is playing backwards, it will no longer be in the proper location when you resume normal playback. For example, if you reverse playback as a way to add emphasis one bar before the chorus in a song, you'll find that playback is now two bars before the chorus when you resume normal playback.

Torq overcomes these shortcomings by implementing reversed playback as an effect rather than as a function of the Deck. By doing so, you can reverse playback instantaneously—there is no lag due to the turntable changing directions. Furthermore, since this is an effect, the song on the Deck will continue to play normally (the waveform will continue to scroll in the forward direction) thus keeping the play position correct as you switch the Reverse effect on and off.

Enable Button

When using the Reverse effect, this button is always on and cannot be turned off.

Amount Knob and Routing Button

The Amount knob has no function. The effect is routed as an Insert effect by default.

Tweak Knob

The Tweak knob has no function.

Tweak Button

This button will turn the Reverse on and off. This button is momentary, meaning you have to keep holding it while the song plays backwards. When you release the button, normal playback will resume.

Brake

Bra

Brake icon

As mentioned above, turntables don't respond instantly to changes in speed or direction. When you press Stop on a turntable, it takes a moment for the turntable to slow down and reach a complete stop. This is due the weight and momentum of the turntable—two factors that don't exist in the virtual world of Torq. Still, some DJ's like the sound of a turntable slowing down to a stop, and creating that sound is the purpose of Torq's Brake effect.

Like the Reverse effect above, the Brake effect does not actually stop the playback of the song on the Deck. Instead, it just simulates the sound of the song slowing down while the song continues to play normally (as seen by the scrolling waveform). Because the song keeps playing, you can use the Brake effect to create the "slow-to-stop" sound, then bring the music back in on the next downbeat (which is impossible with real turntables or CD players).

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Enable Button

This button will be on at all times—it cannot be turned off.

Amount Knob and Routing Button

The Amount knob sets the wet/dry mix of the effect--turn this knob fully clockwise for the proper sound. The Brake effect is automatically configured as an Insert effect.

Tweak Knob

This knob will set the Brake time. As you turn this knob clockwise, the Brake time will become longer.

Tweak Button

Press this button to engage the Brake effect. The music will slow to a stop. Press the button again to resume normal playback.

Repeat

Repeat icon

This effect can be used to create the granular “hyper-repeats” heard in lots of today’s dance music. All you have to do is trigger the effect and play with the loop length to get instant results. Here’s how it works:

Enable Button

Engaging this button will start the effect. The Repeat will remain active until this button is turned off again.

Amount Knob and Routing Button

The Amount knob will set the wet/dry mix of the Repeat effect. Turn the knob fully clockwise to hear only the repeated audio. While the audio is repeating, you can use the Amount knob to fade the original music back in if you wish. The effect will automatically be configured as an Insert effect when loaded.

Tweak Knob

This knob sets the size of the audio slice being repeated. A tooltip will appear showing the current slice length whenever you move this knob. The repeated slices will always be quantized to the current tempo.

Tweak Button

When you press this button, it will “re-seed” the Repeat effect. In other words, the effect will begin repeating a new section of audio whenever you press the button, as if you’d instantaneously turned the effect off and back on again.

Beat Reverse

?Question¿ Is there any info about this?

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VST Effects

The built-in effects provided with Torq cover a wide range of effects typically used by DJ's. However, others DJ's will want to explore the possibilities of additional effects. For this reason, Torq allows you to use third-party VST plug-ins.

VST Plug-in pane

Latency

Another potential drawback from using VST plug-ins is latency. Latency is the observed lag between when you trigger an event or action on the computer and when you finally hear the results. When running without any VST plug-ins, Torq's latency is nearly undetectable—Torq will respond to scratches, button presses, and knob movements immediately.

Some VST plug-ins, however, must perform very complex calculations on the audio. Sometimes, these calculations require that the plug-in buffer the audio so that it can process it in large chunks. In these cases, the plug-in will fill its buffer with some audio sent from Torq. It will then process the audio and send it to an output buffer. Once the output buffer is filled, the audio is sent back to Torq. This process, while extremely fast, can still manifest itself as a perceived lag in response time. And, as you can see, this phenomenon is beyond the control of Torq (the latency is created by the plug-in, not Torq).

If you find that a VST plug-in you're using is creating latency, you can try to find a similar-sounding plug-in with minimal latency, or simply try to "play ahead" and anticipate the latency. While some other programs feature "Plug-in Delay Compensation," such a system would not work with Torq because the program is entirely real-time (the music and effects are not preset or programmed).

Selecting Effects

To begin using a VST, you'll need to select one from the list of available VST's.

To select a VST plug-in:

1 Click on the top window in the VST section of the Effect Rack. A pop-up menu will appear showing all valid VST's in the selected VST folder (see Plug-in Preferences).

2 Click on the name of a VST. It will be loaded immediately and the VST's graphic interface will open and float over the Torq interface.

3 To close the window, click the close icon in the window's title bar or click the Wrench icon in the Effect Rack.

4 To open the same VST interface again, click the Wrench icon again.

At the top of the VST drop-down menu list, you will see a "blank" plug-in as an option. If you select it, no VST will be loaded into the Slot (any current VST will be unloaded).

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Assigning Controls

It's fun to tweak effects using knobs and buttons—VST effects are no exception. However, before you start messing with the Tweak knob and button, you'll need to assign a function to them. Unlike Torq's 10 built-in effects, the VST Effect you choose to use will probably have more than two parameters to play with. You can always adjust these parameters within the VST Effect's editor window. To gain MIDI control, however, you must assign one of the VST Effect's parameter to the Tweak knob or button (which you can control via MIDI). It's a two-part process as outlined below.

To assign VST plug-in controls to Torq Tweak Knobs and Buttons:

1 Load a VST Effect. Its editor window will pop up when loaded.

2 Right-click on the Tweak knob in Torq's interface. It will turn red indicating that it standing by for assignment.

3 Using the mouse, move a control in the VST Effect's editor window. This could be a knob, slider, or button.

4 When you move the control, Torq will catch it and assign it to the Tweak knob. Moving the Tweak knob will now operate the assigned VST parameter.

5 To assign a MIDI control to the Tweak knob, follow the usual procedure of right-clicking then moving your desired MIDI control.

6 Once complete, the MIDI control will operate the VST parameter.

The same procedure above can be used for assigning a VST parameter to the Tweak button.

Once the assignments are made as described above, Torq will remember those assignments whenever you load that VST Effect in the future.

> *When running Torq in full-screen mode, clicking on the Torq interface will cause Torq to move to the foreground and your VST Effect to move to the background, effectively being obscured from view. To bring the VST Effect back to the front, click on the Wrench icon in the VST Effect slot or click the effect's Taskbar/Dock icon.*

VST Crash Guard

A plug-in works by inserting small bits of programming code into another program (in this case, you'll be inserting an effect processing plug-in into Torq). This can be problematic since some VST's are made with little to no external testing at all (and they may not have been tested with Torq specifically). Granted, it's usually the free VST plug-ins found on the web that lack the testing imposed by other professional plug-ins. These dirty plug-ins can be some of the most experimental and creative offerings out there, which is why you may still want to try them.

Obviously, it would be completely unacceptable for Torq to crash right in the middle of a gig because of a little VST plug-in. The music must keep playing at all times. For that reason, Torq has been designed with VST Crash Guard, which is a system that will allow Torq to stay running even if an error should occur in the VST plug-in, causing it to crash. If this occurs, Torq will detect the crash and will quickly bypass the offending plug-in to keep the music going. When this happens, you can either attempt to re-load the plug-in (in hopes that it will reset and become functional again) or you can remove the plug-in and try another. Either way, Torq's got your back and will keep the music flowing.

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VST Preset Management

Just like you can save the built-in Effect Rack, you can also save the settings for a VST plug-in. Some plug-ins will manage their own presets from within the GUI. In these cases, you'll need to consult the plug-in's user manual to learn how to use the presets.

Other VST plug-ins will rely on the host application (Torq, in this case) to manage their presets. In this case, you'll need to use the Preset Management tools (save and load) that appear above the plug-in's GUI.

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Chapter 9: Sampler

A sampler is a device that will digitally record a sound that you can then replay at various pitches. If you're into any kind of electronic dance music or hip-hop, you've undoubtedly heard samplers in use.

But what good is a sampler for a DJ? In recent years, DJ's have used samplers to add sound effects to their mix. Such effects range from simple sounds like laser guns and bombs to more complex passages, such as a radio station's identification or the DJ's name. Torq's Sampler will let you do the same—and due to its tight integration with the Decks, you'll also be able to record loops that will stay synchronized to your mix. This will give you the ability to record and layer a song back on top of itself, or to play other loops in sync with your music. This can be especially effective when using the Sampler with various drum and percussion loops—you can create your own drum patterns to layer with your mix for added emphasis, or to keep the beat flowing during a breakdown in the music.

Torq has 18 individual Sample Slots, each capable of recording and playing back a single audio sample. Below, you'll learn the how to use the various controls in the Sampler along with techniques for capturing perfect loops.

Sampler

Signal Source

Before you can record a sample, you must choose an audio source for the sample. When using Torq, this is as simple as engaging the PFL (headphone icon) on a Mixer channel. When you do this, you'll hear that channel in your headphones and it will also be routed to the Sampler. This means that the Headphone Volume slider also acts as the Record Level adjustment for the Sampler.

This routing scheme has two benefits. First, you can record a sample from an audio source that your audience cannot hear. For example, you could record a vocal break from your next song and play it to hint at the track you're about to play. Secondly, this routing scheme allows you to record from more than one source at a time. If you enable the PFL on multiple Mixer channels, their signals will be mixed together for sampling as a whole.

The idea when making any type of digital recording is to record the sound as loud as possible, but not so loud that it causes distortion. Like "The Price Is Right," you want to get as close to the maximum without going over. Torq includes a limiter on the PFL, so you won't have to worry if the sound you're recording has a few loud peaks—they won't cause distortion.

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Sampler Controls

This section provides an overview of the controls within the Sampler.

Record Sample Button

Samples can be categorized into two groups: one-shot samples and loops. One-shot samples are sounds that play once when you trigger them and are not automatically synchronized to your mix. Loops are samples that will play repeatedly— when the end of the sample is reached, playback will return to the beginning. Torq will play these loops in sync with the Global Tempo, allowing you to use multiple loops from different sources all at once.

The method in which you use the Sampler's Record button will determine whether you record a loop or one-shot sample:

Recording One-Shot Samples:

1 Press the Pre-Fader Listen (PFL) button in the Mixer to indicate the desired source of the sample. The button will light up.

2 Press the circular RECORD button in the sample-cell you want to record to. The button will turn red to indicate that Torq is recording.

3 When the Record button is pressed again, the button will turn off, and the recording will stop. The sample is now ready to play.

Recording Looped Samples:

1 To record a loop instead of a one-shot, press and hold SHIFT while clicking on the Record button. Instead of beginning recording immediately, recording will wait for the downbeat (determined via the phase information of the source Deck). The Record button will be yellow while it's waiting for the downbeat. Once the downbeat is reached, the button will turn red and recording will commence.

2 Clicking the Record button again while recording will not stop recording immediately. Instead, recording will continue until the end of the next bar (again, determined by phase information from the source Deck). The Record button will be yellow while it's waiting for the end of the bar (the Sampler will be recording during this time). Once the end of the bar is reached, recording will stop and the loop will be ready to play (loop will already be selected).

Naming Scheme for Recorded Samples

Each time you record a sample, Torq will give it the name "SampleXXX.wav" where XXX is an automatically generated number. The number will increment every time you create a new sample, regardless of which Sampler you use for the recording. The first sample you record will be named "Sample001.wav." The next sample that is recorded will be named "Sample002.wav," and so on. This numbering can be reset to start at 001 within the Torq Preferences menu. You can also rename any recorded sample using the Rename Sample function which is detailed later in this section.

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Trigger Sample Button

Pressing this button causes the associated sample to play. One-shot and looped samples exhibit slightly different behaviors:

Triggering One-Shot Samples:

1 Click the Trigger button. The button icon will light and the sample will play immediately. During playback, a progress bar (behind the sample's name) will fill from left to right. When the sample ends, the Trigger button will turn off.

2 If the Trigger button is pressed while the sample is already playing, the sample playback position will immediately jump back to the beginning of the sample.

3 To stop sample playback before the sample ends, hold the SHIFT key on your computer keyboard and click the Trigger button. This will stop the sample immediately.

Triggering Looped Samples:

1 Click the Trigger button. The sample will start playing in sync with the Global Tempo (when the Global Tempo button is active). If you trigger the sample at a point other than the downbeat, the sample will jump to the proper playback location in order to remain in sync with the Global Tempo. If Global Tempo is off, the loop will play independently of the current tempos.

2 To stop the loop, click the Trigger button again. The loop will stop immediately.

3 To stop the loop immediately, hold the Shift key while clicking the Trigger button. The loop will stop immediately when clicked.

Loop Sample Button

The Loop option can be checked or unchecked to enable or disable sample looping. When active, the sample will loop automatically when it reaches its end. The looping will be synchronized with the Global Tempo if the Global Tempo button is activated.

When deactivated, the sample will be triggered as a one-shot. This means the sample will play only once when triggered.

> *If you wish to use samples already on your hard drive (as opposed to recording them in Torq), the sample will need to be cut to an even bar length in order for the loop to play properly. You will need to use an external audio editor to cut the loop if it's not already trimmed to the proper length.*

Sample Volume Knob

Each sample has its own volume control allowing you to mix multiple samples together with appropriate levels. Click and drag up and down on this knob to change the sample playback volume. Hold SHIFT and click on the knob to reset the volume to unity (the original sample volume).

Sample Speed/Rate Knob

This knob adjusts the playback speed of a one-shot sample, or will scale the playback rate of a looped sample.

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When using one-shot samples, the Speed knob will set the playback speed/pitch for the sample. When the knob is set at 12 o'clock, the sample will play at its original speed.

When using looped samples, this knob will either double or halve the playback rate in order to remain in sync with the Global Tempo. When the knob is turned counter-clockwise, the playback rate will be cut in half. Turned clockwise, the playback rate will be doubled.

Sample Name Window

The Sample Name window serves multiple purposes:

- It will display the name of the sample file loaded into the slot.
- The background of this window will fill from left to right as the sample plays, like a progress meter.
- Clicking on this window will display a pop-up menu with the following options:

Load Sample

Choosing this option will open a standard dialog box. Use this dialog to navigate to your hard drive and locate a sample. If you load a sample into a slot that already has a sample loaded, the current sample will be immediately replaced.

Save Sample

Choosing this option opens a standard Save dialog box. Use this dialog to name the current sample and save it to a specific location. The new name will also be displayed in the Sample Name window.

This option will be unavailable (greyed out) if the sample slot is empty.

Rename Sample

Once you've recorded a sample, you can rename it from the generic "SampleXXX" naming format automatically applied to new samples. Simply click this option in the menu and type in a new name for the sample. The file on your hard drive will be renamed to match.

This option will be unavailable (greyed out) if the sample slot is empty.

Unload Sample

Choosing this option will remove the current sample from the sampler.

Load Sample Bank

This option will allow you to load a bank of 16 samples into the Sampler using only one action. Choosing this option opens a standard dialog box that looks only for ".tsb" (Torq Sample Bank) files. Browse your hard drive and select a .tsb file. Torq will read this file and load the required sample files into the appropriate slots. It will then set the playback parameters for each sample.

This operation will replace any samples that are currently loaded into the Sampler. If you want to keep the current configuration, save the bank (using the procedure below) before loading a new bank.

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Save Sample Bank

Once you have built a collection of samples (drum loops of a particular style or a collection of vocal stabs, for example), you can save the collection as a sample bank. Choosing this option from the menu opens a standard Save dialog box that will save a proprietary Sample Bank file. This file references the samples currently loaded into the Sampler. Browse to your hard drive and choose a location to save the file. The file will be saved with the extension ".tsb" (Torq Sample Bank). A file folder will also be created (of the same name) but with the word "Samples" appended to the end. This "Samples" folder will contain copies of the samples used in the bank for easy recall in the future.

QuickScratch

This feature lets you control a sample using the variable-speed and variable-key engine within a Deck. This means you can scratch the sample using the mouse or qualified hardware controller.

Assigning Samples

Each Torq Sampler has 4 QuickScratch buttons (A, B, C, and D) which correspond to each Deck respectively. When you press one of them on a sampler, the associated sample is immediately loaded onto the Deck. For example, pressing the A button on Sampler 3 loads the sample onto Deck A. In this instance, the A button on each of the remaining samplers will be greyed out. You can then manipulate the sample in the same manner used for full songs. Press the QuickScratch button again and the original song will be loaded back into the Deck.

Looping a QuickScratch

If a one-shot sample is used as a QuickScratch, the sample will not be looped when loaded onto the Deck. If a looped sample is used as a QuickScratch, the sample will be looped when loaded onto the Deck so that it will play indefinitely.

f you change the QuickScratch assignment in the Sampler while using the QuickScratch feature on a Deck, the sample used in the Deck will be updated immediately.

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Chapter 10: Synchronization

At most of today's dance clubs and events, the DJ will mix the songs together using a technique called beat-matching. The goal is to fade the volumes between two songs while keeping them perfectly in beat with one another. If done properly, the audience will never have to stop dancing as the beat of one song will blend in with the beat of the new song—sounding like one single song. DJ's will do this for hours at a time, creating one gigantic non-stop mix from the individual songs they have in their collection. Proper execution of this technique requires the mastery of two tasks: matching tempo and matching phase.

Automatic Tempo and Phase Detection

As mentioned before, tempo is the measurement of speed of a song expressed as BPM. Phase refers to the location within a song in reference to its downbeat. Torq automatically determines the tempo and phase of a song when you load it onto a Deck, so matching tempos is as simple as moving the Speed slider on a Deck until the BPM Display shows the same value as the other Deck. If you're using external vinyl or CD control, you can adjust the speed of the song using the turntable's or CD player's pitch adjuster.

Once you have matched the tempos of two songs, you need to start both songs at precisely the right moment, or in-phase with each other. When beat-matching songs, you'll normally want the downbeats of both songs aligned with each other. When aligned properly, the beats of both songs will blend together into one larger beat. If the songs are misaligned or out-of-phase, it will sound terrible as the beats of the two songs will be playing at different times (in DJ jargon, this is known as a "train wreck" and is something that should be avoided at all times).

Torq's Scrolling Waveforms will help you match the phases of the two songs. Not only can you visually align the transients in the waveforms, you can also use the Phase Grid for automatic synchronization.

Phase Grid Manipulations

Torq places a Phase Grid over the Scrolling Waveforms to help you see where the beats are, even during a breakdown or "rhythmless" intro of a song. In order for Torq's automatic synchronization to work, the Phase Grid will need to be aligned properly with the music. With the Phase Grids of both songs aligned properly, Torq will be able to sync the two songs together without creating train wrecks. Torq will attempt to place the Phase Grid in the proper location during song analysis. If Torq positions the Grid incorrectly, it will be up to you to re-align it to the proper beat.

Waveform with misaligned Phase Grid

When a mis-alignment occurs (as seen above), you'll see that the grid does not line up with the beginnings of the beats (transients) in the waveform. In the example, the Phase Grid is too early, leaving a gap between the grid lines and the transients in the waveform.

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There are a number of ways to fix a mis-aligned Phase Grid. Which method you choose to use will probably depend on whether you're comfortable using the mouse and keyboard, or whether you prefer to use external MIDI control. The results are all the same, so choose whichever feels good for you.

If the song you're attempting to use has tempo variations, Torq's automatic beat and phase detection will not work. You will have to manually set the tempo for the song using Tempo Anchors as detailed in Chapter 3 before you will be able to exploit Torq's automatic synchronization.

Adjusting with the Mouse

To adjust the Phase Grid placement with the mouse:

1 Hold down the Shift key, then click-and-drag left or right with the mouse.

2 The Phase Grid will move left or right, following your mouse movements.

3 Once you have aligned the thicker "downbeat" marker of the grid to the downbeat of the music, release the mouse button.

Waveform showing aligned downbeat markers

You can turn on Caps Lock instead of holding Shift if you need to adjust the grid using just one hand. Turn off Caps Lock when you're finished so you can regain proper control of the waveforms.

Adjusting with Nudge Buttons

Nudge buttons

Hold down the Shift key, then click on one of the Nudge buttons.

The Phase Grid will move left or right depending on which Nudge button you click.

Use the buttons to align the thicker "downbeat" marker of the grid to the downbeat of the music.

Adjusting with Offset Buttons

Offset buttons

Hold down the Shift key, then click on one of the Offset buttons.

Instead of making a small change to the Phase Grid, this will have the effect of moving the grid an entire beat left or right. This is a quick way to fix the Phase Grid if it happens to be aligned to the beats but has the downbeat in the wrong location.

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Sync Button

Sync buttons

Pressing the Sync button automatically synchronizes a Deck's tempo to match the Master Deck or Global Tempo. This aligns the song to the phase of the Master Deck or Global Tempo.

While Sync is active, the Deck will be affected by tempo changes made by the Master Deck or Global Tempo. If you slow down the Master Deck, the other Deck will also slow down. If you attempt to scratch or re-align the second Deck, Torq will automatically snap it back into alignment to match the phase of the Master Deck.

When you turn Sync off on a Deck, it will keep the tempo setting allowing the song to keep playing in time with the other Deck. However, Torq will no longer attempt to keep the two Decks in sync if you make changes to them. Torq will no longer snap the songs back into alignment if you move one of them, nor will Torq continue to match tempos if you change them.

For more information about automatic and manual Master Deck selection, refer to "Auto Master Deck" on page 22. Refer to "Global Tempo" on page 91 and "Global Tempo" on page 99 for more information about the Global Tempo function.

Momentary Sync

When you turn Sync off on a Deck, it will keep the tempo setting allowing the song to keep playing in time with the other Deck. However, Torq will no longer attempt to keep the two Decks in sync if you make changes to them. Torq will no longer snap the songs back into alignment if you move one of them, nor will Torq continue to match tempos if you change them. So with the other deck set as the Master Deck, if you just need to synchronize for a moment and wish for the music to run freely afterward, click the Sync button once to turn it on, then click it again to turn it back off—the Tempo will be matched to the other Deck, and you'll be free to start and manipulate the music as you wish.

Global Tempo

Using the Sync button as described in Chapter 3, "Decks" lets you sync the Decks to the Global Tempo. However, if you do not have an active Master Deck and you wish to synch your looped samples to your mix, or if you want your mix to follow the tempo of the ReWire host, you'll use the Global Tempo.

Global Tempo controls

When you click the Global button, the Global Tempo will be active. Now, when you press the Sync button on a Deck, it will sync to the Global Tempo instead of one of the other Decks. Additionally, when you trigger looped samples, those loops will play in sync with the Global Tempo (and any synced Decks).

Changing the Global Tempo will result in the same change to the synced Decks and the Sampler.

There are a couple ways to adjust the Global Tempo:

- Use the + and – buttons to increment or decrement the current tempo by one BPM.

– or –

- Hold the Shift key while dragging up and down on the Global Tempo Display to make smooth changes to the tempo.

– or –

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- Click repeatedly on the Global Tempo Display to tap a new tempo.

This synchronization method is only available when Auto Master Deck is switch off and you do not have a manually selected Master Deck set up as described in Chapter 3, "Decks."

Global Tempo LEDs

To the left of the Global Tempo display is a horizontal arrangement of 4 lights. These will light in succession (creating a "chase" pattern) that will indicate the Global Tempo's position within a bar. These lights will only chase when Global Tempo is activated.

Global Tempo Metronome

Clicking the Headphone button next to the Global Tempo Led, lets you hear the metronome in your headphones. Though the sound of the Metronome can be heard in the headphones, it will not be recorded into the Sampler, or heard by the audience.

Auto Master Deck Selection

?Question¿ Are there any other details on Auto master Deck Selection beyond what I've written in Chapter 3? If not then I will delete the ADMS heading.

Master Sync State

Are the any details on Master Sync State?

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Chapter 11: Snapshots

By now, you've surely noticed that Torq has many features designed to make DJing easier. Automatic tempo-detection and beat-matching allow you, the DJ, to spend your time doing other things rather than manually keeping tracks in sync. For example, you can remix the song using loops and QuickCues, adjust the sound using effects and EQ, and add samples to the mix. Torq's innovative Snapshot system allows you to perform multiple tasks with the push of a button or two.

A Snapshot is very much like it sounds—a virtual picture of settings within Torq. You can configure the controls and effects in Torq as you like, then save all those settings in a Snapshot that you can recall instantaneously. Torq enables you to make a virtually unlimited list of Snapshots, all with unique control parameters, and sort them in the Snapshot list—this list becomes an arsenal of your best tricks, which you can use at any time.

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Snapshot List

If you press the Tab key on your keyboard or click on the Snapshots heading in the Browser Index, the File List will be replaced with the Snapshot List. The list has multiple columns, like the File List, and each row represents one Snapshot. Press the Tab key again (or click the Browser tab) to return to the Database and Browser.

Camera tab

Creating a Snapshot

To create a new Snapshot, click the New Snapshot button above the Snapshot list or the Take Snapshot button located in the Torq Toolbar. Torq will immediately create a new Snapshot entry and the name will be highlighted so that you can type in a proper name for the Snapshot. Type in something you can remember and press Enter. You can always rename the Snapshot by double-clicking its name and typing in a new one.

Masking a Snapshot

Each Snapshot you create contains the settings of almost every component in Torq. A Snapshot will remember the Key setting of a Deck, the EQ settings in the Mixer (including the state of the EQ Kills), the channel gains and volumes, the Crossfader position, and the contents and settings of the built-in Effect Racks (VST effects are not saved in the Snapshots). You can therefore have a Snapshot that will update all of these parameters at once, if you wish.

More often than not, however, you'll want to only override a portion of your current settings using a Snapshot. For example, you may want to recall the settings of one effect rack while leaving all other settings (channel volumes, EQs, etc.) as they currently are. This is the purpose of masking, which allows only particular portions of the Snapshot to be used.

Each column in the Snapshot List corresponds to certain portions of the Torq interface. You'll find columns for Deck A, Deck B, Deck C, Desk D, Key, FX, EQ Kills, EQ knobs, Crossfader, and channel volumes. When you create a new Snapshot, these columns will be blank. As a result, nothing will happen when you trigger the Snapshot.

The way to enable the Snapshot is to place check boxes in these columns to indicate what portions of the interface you'd like the Snapshot to control. If you put a check box in the Deck A column, the Snapshot will use the information for the left side of the interface. You can check Deck B instead if you wish the Snapshot to only affect the right side of the interface. Check them both and the entire interface can be updated with the Snapshot.

Once you've selected which Deck(s) should be controlled by the Snapshot, place additional check boxes in the columns corresponding to the parameters you'd like to control. For example, if you check the Deck A and EQ knobs columns, only the EQ knobs on the left side of the mixer will be updated when the Snapshot is triggered. Any other settings (the current key of the song, any effects in the Effect Racks, etc.) will remain unchanged. If you were to also check the EQ Kills and Key columns, the Deck's Key setting will be updated by the Snapshot, along with the EQ Kills, too. Checking all of the columns and all parameters within the Snapshot will override the current settings. When you release the Snapshot, all previous settings will be restored.

Using Snapshots

The second column in the Snapshot list is labeled Assignment and contains the name of the current keyboard key or MIDI note assigned to the Snapshot. When you make a new Snapshot, this column will be blank. Simply right-click (CTRL-click on Mac) on the empty field and the message "Press a key..." will appear, indicating that Torq is waiting for your key assignment. Press a key on your computer's keyboard, or trigger a MIDI note on your external controller, and Torq will immediately bind it to the Snapshot. Right-click again to assign a different key, if you wish. Now, the Snapshot will be activated any time you press the assigned key.

~~Due to the large number of Snapshots you may create while using Torq, you can to use modifier keys when making assignments. For example, you can assign the W key, SHIFT+W, CTRL+W, and ALT+W to different Snapshots—you can even use multiple modifiers, like CTRL + SHIFT + W.~~

Duplicate Snapshot

Click on a Snapshot in the list to select it, then click the Duplicate Snapshot button (the third button from the left). Another Snapshot will appear in the list, but this one will contain an exact copy of the parameters from the previously selected Snapshot. You can give the duplicate a new name, then select different masking parameters to make the Snapshot behave differently. Assign a different key to this Snapshot, and you can fire off either with ease.

Duplicate Snapshot button (highlighted)

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Swapping Snapshots

Frequently, you may find that a Snapshot set up for one deck would be useful for another or vice versa. For example, you may have created a Snapshot that loads a Delay effect while also killing the Low EQ on Deck A. Torq allows you to swap the left and right assignment of Snapshots to do this easily.

To start with, duplicate the Snapshot as described above—a copy of the Snapshot will appear in the list. Give this new Snapshot a new name (i.e. if the original Snapshot was called "HP Delay A", you might rename it to "HP Delay C"). Once you've created the new duplicate, place check marks in the Swap and Deck C columns and remove the check mark from the Deck A column. This will essentially take any assignments made to Deck A and now apply them to Deck C when using this Snapshot.

Delete Snapshot

The third button above the Snapshot list is the Delete Snapshot button. Select a Snapshot from the list then click this button to delete it.

Momentary vs. Latching Behavior

By default, a Snapshot will only be active as long as you hold the assigned key. As soon as you release the key, the Snapshot is deactivated and all previous settings are restored. This is excellent for simply "punching in" little tweaks and effects that you only use for a few moments at a time.

If you place a check box in the "Latch" column of the Snapshot list, the Snapshot will become active when you press the assigned key and will remain active even after you release the key. When you press the same key again, the Snapshot will be turned off. This mode allows you to recall a setting that you may want to leave active for a while, such as a special stutter pattern that you created using multiple Strobe effects.

Polyphonic Snapshots

On top of all this, you can trigger multiple Snapshots at a time. You can, for example, trigger one Snapshot that cuts the bass and boosts the treble on Deck A while triggering another that detunes the track on Deck B.

You'll notice that whenever you activate a Snapshot, its check boxes in the Snapshot List will light up, indicating that those parameters are being controlled by the Snapshot. On the occasion that you trigger another Snapshot that has conflicting settings (both Snapshots you're triggering have FX checked, for example), the last Snapshot you triggered will take precedence. You'll note that the green check mark in the FX column of the first Snapshot will turn red, indicating that the parameter is overridden by the other Snapshot. As soon as you deactivate the second Snapshot, the red check will turn green again, indicating that the parameter in the first Snapshot is in use again.

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Chapter 12: Rewire

Now that you've mastered all the techniques and tricks in Torq, where do you go from here? Remixing and production. After all, Torq offers you so many tools for remixing and sound design that you can cross over the boundary of simply playing songs and easily enter the realm of music production.

Torq is unique in that it can operate as a ReWire slave. ReWire is a special technology created by Propellerhead that allows two or more different audio applications to share audio and MIDI data. The system is composed of a single ReWire host and multiple ReWire slaves. The slaves will all send their audio outputs to the host, allowing you to mix, EQ, and refine the audio using the tools within the host application. Furthermore, the host and slaves will all share transport and timing information, allowing the multiple software applications to act as a single unit.

While Torq will interface with any ReWire host application such as Pro Tools or Ableton Live.

To begin a ReWire session:

1 Launch the ReWire Host application. This could be Ableton Live, Pro Tools M-Powered, or any other application that will host a ReWire session.

2 Launch Torq. Since Torq is launched second, it will automatically launch into ReWire Slave mode.

3 In order to hear Torq, you'll need to select Torq as the source for audio channels in the host application. In Live, this is done by selecting "Torq" in the top box of the Channel I/O strip. You'll also need to turn the Monitoring to "In" to allow the audio from Torq to pass through Live. In Pro Tools, choose or create a new Aux track and select the ReWire plug-in (Torq) in the top effect slot.

Global Tempo

Clicking the Global Tempo button changes Torq's Global Tempo to the tempo and timeline in a ReWire Host application such as Ableton Live or Pro Tools. This lets you synchronize any or all of the decks to the Host by clicking their corresponding Sync button. Now any song you play on a synced deck in Torq is "locked" to whatever you're currently doing in the host program even if you change the tempo while the music is playing.

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Audio Routing

When using two programs together via ReWire, the audio generated by Torq will be fed to audio channels in Live (or whatever Host application you choose to use). With this system in place, you can further process the outputs of Torq using the Host application's effects. You can record the output of Torq into the application to add to your productions. You can also create your own drum parts, basslines, and other loops in the Host which can be layered on top of the music you're playing in Torq— you can even play instruments in real time for spontaneous results.

When Torq is used with a regular audio interface, you have the option of assigning various output channels of Torq to outputs on the audio interface (see Audio Preferences). When using ReWire, those same audio outputs are available within the Host application. If you switch Torq into External Mixer mode, you'll find that ReWire channels 1 and 2 carry the signal from Deck A, channels 3 and 4 carry the signal from Deck B, and channels 5 and 6 will carry the audio from the PFL/Headphone signal (for recording into Torq's Sampler). If you use Internal Mixer mode, channels 1 and 2 will carry the Master Output (from the Mixer) while channels 3 and 4 carry the PFL/Headphone signal. This allows you to create your own monitoring path or mixing path in the Host application to suit your needs.

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Chapter 13: External and MIDI Control

One of Torq's greatest features is the ability to use external sources to control the playback of your song files. This lets you use the Torq Control Vinyl or Torq Control CD's, as well as other qualified hardware to provide the same method of DJing as traditional turntables and/or CD decks. Torq also allows you to use external MIDI hardware to control nearly any feature within the application.

The Control Vinyl and Control CD system works by using vinyl records and compact discs imprinted with special control signals. You'll play these control signals on your turntables and/or CD players and feed that signal into any professional audio interface that has four inputs (with phono preamplifiers on each input if you are using turntables) such as the M-Audio Conectiv. Torq will listen to those audio signals and will use the encoded information to control the playback of the Decks.

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Enabling Vinyl/CD Control

To enable Vinyl or CD control:

1 Connect the outputs of your first turntable or CD player to inputs 1/2 of your audio interface. If the interface has a "Line/Phono" input selector switch, be sure to set it to "Phono" if using turntables, or "Line" if using CD players (or turntables with built-in preamps).

2 Connect the outputs of your second turntable or CD player to inputs 3/4 of your audio interface. Again, you'll need to set its input selector switch as described above.

Using Torq with only one turntable or CD player:

The connection diagram on this page assumes you have a traditional DJ setup two CD players or turntables.

3 Open Torq's Preferences and select the Audio tab.

Audio preferences tab

4 Make sure your audio interface is selected in the Audio Interfaces drop-down menu.

5 Click the Control Input A drop-down menu and choose "input 1 -- input 2".

6 Click the Control Input B drop-down menu and choose "input 3 -- input 4".

7 Click the External tab.

External preferences tab

8 ~~The first option enables External Control. Click the drop-down menu and select "Yes"~~.

9 The next step requires you to select the type of control signals you'll be using for each Deck. If you'll be using the Torq Control Vinyl records, select "Torq Vinyl" for the Control Type. If you'll be using the Torq Control CD's, select "Torq CD" for the Control Type. Since this selection is independent for each Deck, you can use any combination of vinyl and CD control that you'd like.

> *If you own the Ms. Pinky Interdimensional Wrecked System, you can use those vinyl records to control Torq. Select "Gen1", "Gen2", or "Gen3" corresponding to the generation of records you own. Torq currently supports generations 1 through 3.*

10 The playback of the Decks will now be controlled by the incoming control signals you have selected.

You can also enable and disable the External Control system by clicking the External Control button in Torq's Toolbar.

External control button

Refer to "Audio" on page 107 for more information about Torq Audio Preferences.

External Control Calibration

While terms such as "digital vinyl" are sometimes used to describe vinyl control systems such as the one used in Torq, the truth is that the system is still analog. There are "digits" encoded in the analog domain on the Torq Control Vinyls and CD's and those digits are transferred to Torq by analog means through the inputs of your audio interface.

Because of this, the control system is subject to certain environmental and physical variables that can influence its performance. The system is very robust and compensates for many of these factors, allowing a wide range of variance between equipment to yield identical control response. This means the equipment you already own (turntables, cartridges, styli, CD players, etc.) is probably sufficient for use with Torq's external control system.

M-Audio has diligently tested the control system using a wide variety of equipment from different manufacturers, but not every possible combination of gear could be tested. While unlikely, it is possible that there could be problems with components in your DJ setup that might render the control system inoperable. When this happens, the Control Calibration displays on the External Control Preferences tab will be your first place to look in order to diagnose the problem.

Control Type

If the external control system is enabled but doesn't seem to be working, first check the Control Type settings for each Deck. If you have the wrong Control Type selected, Torq will not react in the proper manner to the control signals. Once you've verified the setting here, you can continue diagnosing your problem.

Velocity and Position

When the external control system is operating properly, it provides three vital pieces of information to Torq's Decks: the speed and direction of the Control Vinyl or Control CD as well as the current position on the record or CD. The Velocity display shows a number that indicates both speed and direction at the same time. When the Velocity is 0, the record or CD is stopped (or the needle has been lifted off the record). If the number

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is 1.0, that means the vinyl record is running forward at normal speed (when using the Torq Control Vinyls, this refers to 33 1/3 RPM playback on the turntable). When the number is -1.0, it means the record or CD is running backwards at normal speed (33 1/3 RPM). As you manipulate the record or CD by hand or with their pitch adjusters, you'll see the Velocity display change immediately to reflect the movements.

The Position display shows a number that Torq uses to calculate the playback position for the audio file loaded into the Deck. When the record or CD is playing forward, this number will increase—it will decrease if the record or CD is playing backwards. You'll also notice that this number will jump whenever you lift the needle off the record and place it in another location (known as a "needle drop"). This is what allows Torq to play back a song just as if it was pressed right into the Control Vinyl or Control CD.

Reversed Playback Direction

If you find that Torq seems to be responding backwards to the Control Vinyls or CD's, take a look at the Velocity display. If the number shown is negative while the control source is playing forward, it could mean that the audio cables connecting the turntable or CD player to your interface are backwards. Swap the left and right plugs on the back of the audio interface and the problem should be fixed.

Erratic Playback Position

If Torq seems to be jumping around to random locations in the song during playback, take a look at the Position display. This number should be rapidly growing larger as the control source plays. If this number looks like it's counting erratically, this is most likely due to damaged control records (which is normal after extended use). This could also be due to poor stereo separation in the turntable's needle or preamp. This is especially common with very old needles. To fix this, purchase a replacement vinyl record, replace your stylus, or purchase one of the recommended styli/cartridges listed at the end of this manual.

Erratic Velocity Values

A turntable is a very sensitive piece of equipment. It can take the smallest vibrations and amplify them into audible sound. That's what's happening when you play a record—the grooves in the record vibrate the stylus as they play and those vibrations are translated to audio. The problem with turntables, though, is that they cannot distinguish between what is an intentional vibration caused by the moving grooves in the record and an unintentional vibration picked up through the body of the turntable. For example, if you kick the table the turntable is on, that "thump" will be transferred through the turntable up through the needle and translated into sound.

What this means, in terms of the External Control system, is that vibrations and other unintentional noise can "contaminate" the control signals being read from the records. When this happens, the noise can temporarily throw off the ability of Torq to track the records.

In order to help minimize this problem, Torq has a setting called "Power Threshold" with various level settings. The idea is to set this value above any of the extraneous noise such that Torq will only focus on the louder control signals from the records.

To set this level properly:

1 Open the External Control Preferences and enable External Control.

2 Place the needle of your turntable on the Control Vinyl, but leave the turntable stopped.

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3 Lower the Power Threshold to -40 and look at the Velocity value for the deck.

4 If the Velocity is showing random values even though the turntable is stopped, that means the Power Threshold is too low—Torq is picking up noise and interpreting it as a control signal.

5 Increase the Power Threshold by 5dB and look at the Velocity value again. If you still see random Velocity values, raise the Power Threshold another 5dB.

6 Eventually, you'll reach a point where the Velocity stays at 0.00. This is the optimal setting for the Power Threshold.

> *If you're in a noisy environment that does not have good physical isolation of the turntables (to prevent external vibrations from being picked up by the stylus), you may need to raise the Power Threshold setting a little higher to filter out the additional noise in the room.*

Error Index

If you've checked your audio cable connections and have also replaced your turntable's needles yet still experience problems, take a look at the Error Index displays. These displays will be showing a number typically between 0.15 and 1.50, which is perfectly normal. If the number is above 2.0, it will turn red, indicating that there is too much noise in the audio signal for Torq to properly track position and velocity. Try cleaning the record using a high quality vinyl cleaning system. Too much dirt on the record can cause errors in the tracking process.

A high Error Index can also be caused by wear and tear on the Control Vinyl. Each time a record is played, it is slightly damaged, especially if the tracking weight of the needle is very heavy. After repeated use, the control signal may become distorted and unreadable. Simply flip over the Control Vinyl to the second side or purchase a replacement record from the M-Audio Webstore (www.m-audio.com).

If the output level of your stylus/cartridge is too low, this can also result in high Error Index readings. Try replacing your stylus/cartridge with one of the recommended models at the end of this manual for a higher output level.

Absolute Mode

This is the default control style when in Standard mode and is indicated by the ABS icon on what was previously the top half of the Play/ Pause button on the Decks. Absolute mode means that Torq will be following the position of the external control source. This is most apparent when using the Control Vinyl—you can lift the needle and place it in different locations on the record and Torq's Decks will follow this position. If you place the needle at the beginning of the record (or rewind the Control CD back to the beginning of a track), the song in the Deck will also jump back to the beginning.

This mode is obviously the mode that will recreate the sensation of using CD's and Vinyl with the greatest detail. You will be able to control playback position from your turntables or CD players without having to interact with the Torq interface.

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Relative Mode

Relative mode will ignore the playback position of the Control Vinyl or Control CD. Torq will only monitor the direction and speed of the control source. To enable Relative mode on a Deck, click the Absolute mode button (ABS). The icon will change to REL indicating that Relative mode is now active (click the button again to toggle back to Absolute mode).

In Relative mode, placing the needle in different locations on the record will have no effect on the music—playback will resume from the point it left off as soon as the needle touches the record again.

Even though the playback position of the Control Vinyl or Control CD is not affecting the playback position of the song on the Deck, the speed and direction of the control source will still continue to work. You can change the playback speed using the pitch adjusters on your turntables or CD players and the playback speed of the Deck will follow. You can even scratch like normal. The added benefit is that, should the needle skip a groove while you're scratching, you won't lose the sound you were using. You can continue to scratch the same location of the audio file even if the needle keeps skipping.

While there will be no audible change in music playback when switching a Deck from Absolute mode to Relative mode, there is a chance that the playback position could jump to an unanticipated position when switching from Relative mode back into Absolute mode. This is due to the fact that, while using the features of Relative mode, the playback position of the Deck and the actual location of the control source could fall out of sync (for example, if you loop the song on the Deck, the song will no longer proceed forward but the location of the control source will continue to play forward). When you switch back to Absolute mode, Torq will immediately jump to the position indicated by the control source...this could even be a position after the song has ended! Therefore, be extremely careful when toggling back to Absolute mode. Only do so if (1) you know the location of the song and control source are still in sync or (2) you mute the Deck before switching over, thus preventing any jumps from being heard by your audience.

Relative Speed Mode

?Question¿ Get Info

Absolute Rotation Angle

?Question¿

BPM Matching

So how does one go about doing a DJ set with only one turntable? It is a little different than doing it in Standard mode, primarily due to the fact that you must use Torq's on-screen Speed sliders to match tempos as opposed to using the pitch sliders on your turntable or CD player.

Try it out:

1 Click Vinyl on a Deck and start the external control source.

2 While the song is playing, move the Deck's on-screen Speed slider.

3 Sure enough—the playback speed of the song changes, just as if you'd moved the pitch slider on the actual turntable or CD player.

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The reason for requiring the use of the on-screen controls lies in the fact that external control can be toggled back and forth between the Decks at will. Any time you do this, you'll want the Decks to keep their previous tempos. If the tempo of a Deck changed when swapping external control, the mix would suddenly fall wildly out of sync.

Therefore, the speed of the Control Vinyl or Control CD must remain constant—Torq will scale the playback rate as appropriate based on the setting of the Decks' Speed sliders. If you change the speed of the control source, you'll find that the Decks suddenly change speed any time you toggle external control.

There is, however, one unique advantage to this setup: you can make use of Torq's automatic beat-matching! Instead of manually moving the on-screen Speed slider with the mouse or MIDI Control, you can simply click the Deck's Sync button and it's Speed slider will be moved to match the tempo of the other Deck. Click the Sync button again to turn it off, and the Deck will remain at the proper speed waiting for the external control signal to begin. All you have to do then is start the music at the right time and keep it in alignment during the mix via external control. This makes the process of preparing the next track much faster.

Runout Protection

Since there is only about 12 minutes of usable control signal on each side of the Control Vinyls or on each track of the CD, it is possible that the song you are controlling could exceed the length of control signal available on the record or CD. This is extremely common when using Relative mode since the needle or CD position could be halfway through when you start the next track.

In order to prevent the music from stopping abruptly if the control signal runs out on the record or CD, Torq features Runout Protection which essentially disables External Control when the record or CD reaches the last 30 seconds of its signal. When this happens, the song's waveform will start to flash yellow and the song on the Deck continue to play. You will now be able to take the needle off the record and place it back at the beginning without Torq stopping the music (the same is true for the CD—you can jump back to the beginning of the track without stopping the music). Once Torq reads a few seconds of signal from the new location, the flashing will stop and Torq will re-engage External Control allowing you to scratch and manipulate like normal.

> *If you are currently in Absolute mode when the last 30 seconds of control signal are reached, Torq will automatically switch the Deck into Relative mode when it engages the Runout Protection. The Deck will remain in Relative mode after you reset the record or CD, thus preventing the music from jumping to an unexpected location when external control is enabled again.*

MIDI Control

Torq provides the option of MIDI control for nearly every button, knob, and slider on the interface. Since MIDI is a common protocol shared between all types of music equipment, you can use almost anything capable of generating MIDI note or CC messages to control Torq—they do not need to be specialized DJ controllers. This will offer you a way to experiment with different control methods when DJing, such as using an M-Audio Trigger Finger to control samples or an M-Audio Axiom 25 keyboard to control effects and pitches.

?Question¿ new MIDI feature "Deck Switch" to control 4 decks with 2-Deck-Hardware.

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MIDI Preferences

MIDI preferences tab

The MIDI page of the Preferences contains options for when Torq is being controlled via MIDI. Refer to “MIDI” on page 112 for more information about Torq MIDI preferences.

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MIDI Learn

Every musician approaches their craft from a slightly different direction. DJing is no different. That is why Torq is basically a blank slate when run for the first time—there are no pre-set control assignments for any of the buttons, knobs, or sliders seen on screen for you to memorize. Instead, you get to assign the most important controls for you to whatever MIDI controls make the most sense to you.

Creating a MIDI Assignment

Torq uses a simple MIDI Learn scheme to make assigning controls on your MIDI controllers a breeze:

1 Right-click (CTRL-click on Mac) the button, knob, or slider you wish to control via MIDI. The control will be highlighted in red indicating that Torq is standing by.

2 Move the desired control on your MIDI controller. That is, move the knob or slider you want to use or press the button/key you wish to use.

3 Torq will intercept the incoming MIDI message and will instantly assign it to the control. The red highlight will disappear and the MIDI control will be active.

Clearing a MIDI Assignment

If you've assigned a MIDI control using MIDI Learn and you wish to clear the assignment, simply right-click (CTRL-click on Mac) the desired control in Torq, then press the Backspace key (Delete key on Mac) on your computer keyboard.

Changing MIDI Assignment

If you assign a MIDI knob, for example, to the Low EQ in the Mixer, you can assign it to the Mid EQ by simply right-clicking (CTRL-click on Mac) the Mid EQ knob and moving the MIDI Knob. Doing so will clear the assignment to the Low EQ knob and the MIDI control will now be mapped to the Mid EQ knob. This allows you to use a small controller for Torq since you can continually reassign its controls without worrying about what the previous assignments were.

Keyboard Learn

You can also use your computer's keyboard to control elements of the Torq interface using the same method as MIDI Learn above. Simply right-click (CTRL-click for Mac) on a control on screen, then press a key on your keyboard. That key will then be assigned to the selected control. The same method for changing and clearing MIDI assignments described above also works for keyboard assignments.

Assigning Buttons to Knobs or Sliders

If you so desire, you can assign a MIDI button/key or a key on your computer's keyboard to a knob or slider in Torq's interface. When doing this, pressing the MIDI button or key will cause the knob or slider's value to toggle between an assignable minimum and maximum value. For example, assign the "X" key on your computer keyboard to the Low EQ knob. Turn up the EQ to +6 using the mouse, then press the "X" key on your keyboard. The EQ will jump to 0. Press "X" again, and the EQ will jump back up to +6.

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Assigning Knobs or Sliders to Buttons

Conversely, you could assign a MIDI knob or slider to one of Torq's buttons. When doing this, the button will turn on anytime the knob or slider is turned past its halfway point (outputting a MIDI value greater than 64). The button will turn back off when the knob or slider is moved lower than its halfway point.

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Chapter 14: Torq Preferences

The Torq preferences let you change the default settings for various functions within the application.

?Question¿ Prefers Icon here.

Clicking the Preferences icon in the Torq tool bar opens the preferences dialogue, which has seven tabs labelled Audio, MIDI, External, VST, Behavior, Locations, and GUI. Each preference page offers various options which can be chosen from the popup menus listed.

Along the lower edge of the preference pane are buttons for accessing the Setup Wizard (see Chapter 3, "Torq 2.0 Configuration"), Controller Assignments Page (see Chapter 15, "Controller Assignments") and the Licensing page Activating and de-activating Torq (see "Activation" on page 4).

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Audio

?Question¿ Screenshot of Audio page here

This page determines how audio is routed and processed within Torq.

Timestretch Algorithm

This section chooses the type of Time-stretching method used by Torq, based on two options:

Standard

This is Torq's default time-stretching algorithm which is suitable for making small changes in Key or Speed. However using performing drastic changes to an song will result in audio artifacts.

Elastique Transient

This algorithm is better suited for making more drastic changes to pitch and key and yields very few audio artifacts. Although this setting offers higher sound quality, it is more CPU intensive and therefore more suitable for faster computers.

Autogain Target (RMS)

This setting lets you choose a gain reduction level that sets the Channel Gain knobs to a position which maintains a volume of 0dB RMS for a song that is loaded onto a Deck. This ensures that the volume levels of all tracks are even before doing a mix.

Audio Device

This preference lets you choose which audio interface to use with Torq from a list of properly installed and connected devices.

Sample Rate

The sample rate determines sound quality of Torq depending on the source material you are playing. This setting lets you choose a sample rate of either 44,100 (default) or 48,000. Although the higher sample rate offer better sound quality it does place heavier demands on your computer. It is recommended to sample the sample rate only as high as you need it to be. If you only play MP3 files or songs from CD's, you should leave the sample rate as 44,100 since this is the sample rate used by MP3s and CD's.

HW Buffer Size

This parameter can cause a lot of confusion for some users, but is actually not that complicated. To understand how the buffer size affects the performance of Torq, you must understand a little bit about how your computer processes audio.

Multi-tasking is a term that refers to doing multiple jobs all at once. It's what allows your computer to run more than one program at a time (i.e. listening to iTunes while surfing the Web). While it looks like the computer is doing two separate things at once, it's actually not—it's still doing only one task at a time, but changing between tasks faster than you can see.

This provides for a streamlined computing experience, but creates a problem when using audio applications. Audio is non-stop—a 5-minute song will play for 5 minutes without interruption. So how can the computer keep audio playing while it's jumping around to do other tasks? The answer is buffering. An audio buffer is a temporary "storage tank" that can hold a brief moment of audio. The computer will fill the audio buffer with music then let the buffer play while it does other things (like update the clock on your screen, check your network connections, monitor RAM usage, etc.). When all things work properly, the computer will complete its other tasks and fill the buffer with more data before the buffer empties, thus resulting in perfect audio while multi-tasking.

If the audio buffer happens to empty before the computer can fill it with more data, the audio playback will stop until the computer can fill the buffer again. These "dropouts" happen very quickly, not sounding like prolonged gaps of silence, but sounding more like clicks and pops or otherwise distorted audio. When this happens, the solution is to either lighten the CPU load (by closing unnecessary applications or processes that are wasting the computer's time) or by increasing the size of the audio buffer, allowing it to play longer (thus giving the computer enough time to perform its other tasks).

So why not just go with a large buffer size and avoid dropouts? The problem is that increasing the buffer size increases the system latency. Latency is the time between when you tell the computer to do something (such as activating an EQ Kill) and when you actually hear the results from the speakers. If you have a large audio buffer, the buffer will have to play out its entire contents before you'll hear any new EQ changes in the audio. When DJing, this can be a nightmare if you're trying to do things with accurate timing—all of your actions will have a delayed effect on the music.

The solution is to set the buffer size as low as it can go without inducing any audio problems. This is just like playing a game of limbo.

To find the appropriate buffer size:

1 Load a song onto a Deck and play it.

2 While the music is playing, open the Audio Preferences.

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3 If music is playing back properly, open the Buffer Size menu and select the next smallest buffer size. The buffer will be updated immediately and the music will continue to play.

4 Listen to the music for a moment. If you do not hear any clicks, pops, or glitches, lower the Buffer Size to the next lowest setting.

5 Keep repeating this procedure until can hear the audio breaking up.

6 Set the Buffer Size to the next highest setting (the last one that worked properly) and your system will be optimized.

While Torq should be very stable at these settings, keep in mind that the system performance can be compromised as you increase the CPU load. This is most notable when using CPU-intensive VST effects or the Elastique Time Stretch algorithm. Loading one of these effects may cause pops and clicks in your audio, at which point you will have to increase the buffer size until the audio is clean again.

⚠ *Using some external VST effects can introduce additional audio buffering (latency) within the Torq application. When this happens, your manipulations of the Decks will seem sluggish. This is a side effect of the VST plug-in being used and not related to this buffer setting.*

Mixer Mode

This option lets you to switch between Internal and External Mixer mode.

Internal

This is the default setting where Torq's on-screen mixer is used to blend the signals from the Decks. When this option is selected you will be able to set channel assignments as describe in "Internal Mixer Mode Channel Assignments" on page 110.

External

This will bypass the Torq mixer and route each Deck to its own output pair on your audio interface. These individual stereo outputs can then be connected to your favorite DJ mixer in the same manner as two turntables or CDJ's. Once you have set the channel assignments described in "External Mixer Mode Channel Assignments" on page 110, you can mix and cue your tracks using your DJ mixer instead of Torq's Mixer.

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Channel Assignments

Each Mixer mode offers a unique set of options which let you assign the outputs of Torq to the channels of the selected audio interface. The options for each Mixer mode are explained below:

Internal Mixer Mode Channel Assignments

Master Buss Output Click to access the pop-up menu and select the stereo output pair for the Torq Master Output. This is the output you will connect to the speakers.

Cue Buss Output Click to access the pop-up menu and select the stereo output pair for cueing (or pre-listening) to the output of a Deck. This is the output for the headphones.

Line Input A Click to access the pop-up menu and select the stereo input pair for use as the Line Input for Channel A of the Mixer.

Line Input B Click to access the pop-up menu and select the stereo input pair for use as the Line Input for Channel B of the Mixer.

Line Input C Click to access the pop-up menu and select the stereo input pair for use as the Line Input for Channel C of the Mixer.

Line Input D Click to access the pop-up menu and select the stereo input pair for use as the Line Input for Channel B of the Mixer.

Control Input A Click to access the pop-up menu and select the stereo input to which your first turntable or CD player is connected.

Control Input B Click to access the pop-up menu and select the stereo input to which your second turntable or CD player is connected.

Control Input C Click to access the pop-up menu and select the stereo input to which your third turntable or CD player is connected.

Control Input D Click to access the pop-up menu and select the stereo input to which your fourth turntable or CD player is connected.

External Mixer Mode Channel Assignments

Deck A Output Click to access the pop-up menu and select the stereo output for Deck A. This signal will not be processed by Torq's Mixer—it will be fed into a stereo channel of an external DJ mixer.

Deck B Output Click to access the pop-up menu and select the stereo output for Deck B. This signal will not be processed by Torq's Mixer—it will be fed into a stereo channel of an external DJ mixer.

Deck C Output Click to access the pop-up menu and select the stereo output for Deck C. This signal will not be processed by Torq's Mixer—it will be fed into a stereo channel of an external DJ mixer.

Deck D Output Click to access the pop-up menu and select the stereo output for Deck D. This signal will not be processed by Torq's Mixer—it will be fed into a stereo channel of an external DJ mixer.

Sampler Buss Output Click to access the pop-up menu and select the stereo output for Torq's Sampler.

Line Input A Click to access the pop-up menu and select the stereo input pair for use as the Line Input for Channel A of the Mixer.

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Line Input B Click to access the pop-up menu and select the stereo input pair for use as the Line Input for Channel B of the Mixer.

Line Input C Click to access the pop-up menu and select the stereo input pair for use as the Line Input for Channel C of the Mixer.

Line Input D Click to access the pop-up menu and select the stereo input pair for use as the Line Input for Channel D of the Mixer.

Control Input A Click to access the pop-up menu and select the stereo input to which your first turntable or CD player is connected.

Control Input B Click to access the pop-up menu and select the stereo input to which your second turntable or CD player is connected.

Control Input C Click to access the pop-up menu and select the stereo input to which your third turntable or CD player is connected.

Control Input D Click to access the pop-up menu and select the stereo input to which your fourth turntable or CD player is connected.

⚠ *When Torq is being used as a ReWire slave the Audio Interface options will be disabled.*

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MIDI

?Question¿ screenshot of MIDI page here.

This page features options which let you determine how Torq is controlled via MIDI.

Auto Detect Devices

When this option is enabled, Torq automatically sets the Audio and MIDI interface options to those of any qualified M-Audio or third party controller and interface connected to your computer. This ensures proper operation of Torq with connected devices.

⚠ *Leave this option turned off if you do not want Torq to replace custom mappings for your controllers or special assignments for your audio interface with default settings.*

MIDI Scratch Sensitivity

This option allows you to configure how rapidly a Deck will respond to messages sent from a MIDI controller (it has no effect on External Control with Vinyl or CD's). It is designed for controllers that will move the waveform back and forth, typically those with jog wheels. Increasing the number, the Deck will respond more rapidly. Decreasing the number, the Deck will respond more slowly.

DJ oriented MIDI controllers with turntable platters will vary in how they handle scratching and nudging. Certain products let you only control nudging, while others (such as M-Audio Xponent) let you control both nudging and scratching. Refer to the product's user guide to learn if each turntable platter is capable of sending out both MIDI note and CC information. If so, you can assign each turntable's MIDI note and CC commands to the corresponding Main Waveform Display in Torq (this is done using the "MIDI Learn" feature described in the MIDI Preferences section of this guide).

If your turntable can only send out MIDI CC information but not MIDI note data (i.e., the turntable is not touch sensitive), then you will only be able to control nudging. Assign the turntable's MIDI CC output to control the corresponding Main Waveform Display in Torq using the MIDI Learn feature.

Refer to Chapter 13, "External and MIDI Control" for more information about MIDI Learn.

Nudge Sensitivity

This setting allows you to adjust Torq's sensitivity to "nudging" or gradually slipping the phase of one deck to match the phase of the other deck. By default this parameter is set to 5. Increasing the number, the Deck will nudge your track more rapidly. Decreasing the number, the Deck will nudge your track more gradually.

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MBC (MIDI Clock)

Torq's Global Tempo can be slaved to an external device that transmits MIDI Clock (called MBC in Torq). In this instance, the Global Tempo which controls all aspects of Torq (the Sampler and synced Decks) will follow the MIDI Clock.

Torq can also transmit its Global Tempo as MIDI Clock so that other MIDI equipment can synchronize with it. External drum machines, groove boxes, synths, etc. than can receive MIDI clock will follow Torq's Global Tempo. Refer to the documentation for your hardware for further information about their MIDI clock capabilities.

In order to use these MBC features, you need to have a MIDI interface connected to your computer. Some M-Audio DJ products, such as Xponent, have a MIDI interface built into them. If you do not have a MIDI interface on your product (or are already using them for connections to other devices), you need to add a MIDI interface to your computer such as the M-Audio UNO USB MIDI interface. The complete range of M-Audio MIDI interfaces can be found on our website at www.avid.com.

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Applications for MBC

Here is a list of some possible applications for MIDI Clock.

External Drum Machine

Dance music is dance music thanks to the drums. You can make your DJ sets even more dance-heavy by layering your own custom beats on the fly with an external drum machine. Add extra kick drums and hi-hats. Double-up a snare drum with a hand clap. Create drum fills where none existed before. Simply slave the drum machine to Torq using MIDI Clock and it will play in time with the Global Tempo, even if you change the Global Tempo.

External Synth/Sequencer

Beats are easy to add, but you may want to take it to the next level and actually add your own synth parts on top of your mixes. New bass lines. Sound effects. Rapid-fire sequencer patterns. Simply slave the external sequencer to Torq and you're ready to go.

Swapping DJ's

If you're in the middle of a Torq set and another Torq DJ is ready to play after you, you can transmit your Global Tempo to that DJ allowing him to sync up everything on his computer to yours, thus allowing for automatic beat-matched transitions between DJ's. If you're the first DJ, set your computer to output MBC and set your last track as the Tempo Master (that will engage Global Tempo and transmit it to the MIDI Output). If you're the second DJ, set your computer to receive MBC and enable your Global Tempo. Your computer will now be in sync with the other DJ. If you're the second DJ, you should also set your MIDI Stop preference to "Freewheel" to ensure that Torq doesn't stop when the first DJ presses stop on his system.

Dual-DJ

If one DJ could sync the beginning of his set up to the end of another DJ's set, then why not sync up the entire length of both your sets? By sharing MIDI Clock between two computers running Torq, two DJ's can sync themselves together and create a massive 4-Deck mixing extravaganza.

Torq and Rewire

Torq's ReWire capabilities allow it to be run alongside applications such as Ableton Live on the same computer. MIDI Clock will allow you to sync up the two applications across two computers. While you won't be able to transfer audio from Torq to the other application without making additional audio interface connections, you can at least get both programs to run in sync with each other. Then, adding clips in Live or tracks in Torq will result in one synchronized performance between both computers.

MBC Input

To slave Torq's Global Tempo to an external MIDI device:

1 Connect the MIDI Output of the external device to a MIDI Input on your computer.

2 In Torq's MIDI Preferences, select the MIDI Input port mentioned above as the MBC Input. Close the Preferences.

3 Click the Global button in Torq's tool bar to enable Global Tempo. Torq's Global Tempo will run independently until an incoming MIDI Clock is received.

4 Enable transmission of MIDI Clock in your external device. Please refer to the product's user manual for the proper method of doing this.

5 Start the external device (possibly by pressing Play or Run).

6 Torq's Global Tempo will change to match the tempo of the external device. The Global Tempo LED's in the Torq tool bar will also flash in time with the external device.

MBC Output

To slave an external MIDI device to Torq's Global Tempo:

1 Connect a MIDI Output from your computer to the MIDI Input of the external MIDI device.

2 In Torq's MIDI Preferences, select the MIDI Output port mentioned above as the MBC Output and close the Preferences.

3 On your external MIDI device, enable reception of MIDI Clock. Please refer to the product's user manual for the proper method of doing this.

4 On some external devices, you'll need to put it into a "standby" mode where it waits for MIDI Clock before it starts to run. This may require pressing Play or Run—please check with the product's user manual to see if this is required.

5 In Torq, enable the Global Tempo in the Toolbar. When activated, Torq will begin to transmit MIDI Clock at the specified tempo, but the external devices will not run.

6 In order to start the external devices, a MIDI Start command must be sent from Torq. In order to do this, click the MIDI I/O indicator in Torq's Toolbar. The button will turn yellow when clicked, indicating that Torq is waiting for the downbeat of the music you're playing.

When the downbeat arrives, Torq will transmit the MIDI Start command and the external device should begin to play. The Global Tempo LED's will also begin to chase, indicating your current position within a bar.

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MIDI Stop Behavior

This preference determines how Torq reacts when receiving a MIDI Stop command from an external device.

STOP When set to Stop, Torq will stop all Decks and Samples upon receiving MIDI Stop.

FREEWHEEL When set to Freewheel, Torq will continue to play, essentially ignoring the MIDI Stop command, thus allowing the DJ set to continue after stopping the external device.

Holding down Shift while clicking the MIDI I/O indicator in Torq sends a MIDI Stop command which stops all decks.

MIDI Clock Out/IN Phase Offset

These two parameters are used to adjust the timing between Torq and the external MIDI devices. If Torq is following the MIDI Clock from an external device, use the MIDI Clock In Phase Offset option to align Torq. If Torq is transmitting MIDI Clock to an external device, use the MIDI Clock Out Phase Offset option to align the external device to Torq.

MIDI Devices

This list shows all MIDI devices currently recognized by Torq. Each device is listed by name and is followed by a pop-up menu for setting the device as being "Inactive" or "Active".

If you wish to use a device to control Torq, choose "Active" from the corresponding pop-up menu. Choose "Inactive" for any controller you do not wish to use with Torq.

External

?Question¿ screenshot of External Tab

This page contains options which determine how Torq functions when decks are set to External Control mode which lets you use control vinyl or CD's with the application.

Refer to Chapter 13, "External and MIDI Control" for more information about controlling decks in External Control Mode.

Skip Protection

When this option is set to "Yes", Torq will maintain playback of the music even if the needle skips across the record. The works in a similar manner to Relative mode (the position of the needle will be ignored after it skips) but the music will not stop playing as soon as the needle leaves the control vinyl. When this happens, the song will continue to play for about half a second. If the needle makes contact with the vinyl again within that time, you will not hear the music stop.

If the tonearm bounces completely off the record, the music will stop.

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Relative Mode

Normal

?Question¿

Absolute Rotation Angle

?Question¿

Relative Speed

?Question¿

Automatic

?Question¿

Off

?Question¿

Control Calibration

The settings in this category configure each input pair of Torq for use with external control vinyl or CD's. For vinyl control, you can use the Torq Control Vinyl or some versions of the Ms. Pinky control records.

Control Type (Gen1, Gen2, Gen3, Torq Vinyl, Torq CD)

This pop-up menu allows you to set the vinyl or CD control source to use for each Deck. To use the Torq Control Vinyl or Torq Control CD, select “Torq Vinyl” or “Torq CD,” respectively. Gen1, Gen2, and Gen3 are for use with Ms Pinky records generations 1, 2, and 3.

Power Threshold

This parameter sets the minimum signal level required to make External Control work. If this setting is too low, quiet noises picked up by the turntable could be interpreted incorrectly as control signals. If this setting is too high, the Deck will not respond to the external control signals at slow speeds. This should be set as low as possible without introducing any anomalies.

Refer to “External Control Calibration” on page 99 for more information.

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Lead In

Any practiced DJ knows that playing and scratching records will eventually destroy them. If the needle is exceptionally heavy or if you scratch in the same place a lot, the grooves in the record can be eaten away thus tarnishing the sound quality. This frequently happens at the beginning of records and is something DJ's call “cue burn”.

With traditional records, cue burn was something to pay attention to because it didn’t sound very good. When using control records like the Torq Vinyls, cue burn becomes a serious issue. This is due to the fact that you use the same two records to play every song in your set all the time and because Torq might not be able to track the motion in a section of the vinyl with cue burn. If you’re using Absolute mode, every song will begin at the same place on the record (at the beginning). Constantly cueing and scratching in this area will eat away at the grooves on the Torq Vinyl.

When using traditional records, spotting cue burn is easy: you hear it. It sounds like the record is really dirty (as if it had been scrubbed with sandpaper). However, when using the Torq Vinyl, you won’t hear cue burn because Torq will still be playing pristine digital audio files. Instead of hearing the audio get scratchy when your control records start getting burned, you’ll find that Torq’s ability to follow the control records is compromised. This usually manifests itself right at the beginning of each song—the music will jump around erratically. This is because Torq is unable to determine the proper location because the signal from the control records has been damaged.

So, instead of hearing the audio get scratchy when your control records start getting burned, you’ll find that Torq’s ability to follow the control records is compromised. This usually manifests itself right at the beginning of each song—the music will jump around erratically. This is because Torq is unable to determine the proper location because the signal from the control records has been damaged.

The usual solution for this is to either flip the record over to the other side or, if you’ve already done that, to throw the record away and get a new one. However, using the “Lead In” option in the Preferences, you can extend the life of your control records.

By default, Lead In is set to “0” which causes the music to start playing from the beginning of the record. Increasing Lean In to “1” will make the music wait for an additional rotation of the record before starting. So, when the start of the record gets burned, increase the Lead In by one value. Once that new location is burned, increase the Lead In again. Once you’ve burned both sides of the record with the Lead In set to 5, you’ll have to buy a replacement.

Velocity

?Question¿

Position

?Question¿

Error Index

?Question¿

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VST

Behavior

This page lets you set limits for functions as described below:

Traq Morph Filter Style

This parameter determines the frequency range affected by the

GUI

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Appendix A: Key Commands

The following tables list Mac and Windows key commands for various Torq 2.0 functions as listed below:

Browser Commands

⚠ *The Up, Down, Left, and Right Arrow Keys are listed as Up, Down, Left or Right.*

Function	Mac Key	Windows Key
Move up or down through the Index or File List	Up or Down	Up or Down
Move between the Index and the File List	Left or Right	Left or Right
Hide or reveal subfolders of a selected Index item	Enter	Enter
Enable or disable Track Preview for a selected song in the File List	Shift + Enter	Shift + Enter
Rewind or forward through a song in Track Preview	Shift + Left or Right	Shift + Left or Right
Load selected song to Deck A	F1 or Cmd + Left	F1 or Ctrl + Left
Load selected song to Deck B	F2 or Cmd + Right	F2 or Ctrl + Right
Load selected song to Deck C	F3 or Cmd + Up	F3 or Ctrl + Up
Load selected song to Deck D	F4 or Cmd + Down	F4 or Ctrl + Down
Jump to text Search Field (*Enter jumps back to Index/File List*)	Ctrl + F	Ctrl + F
Jump to Filter Text Field (*Enter jumps back to Index/File List*)	Ctrl + Shift + F	Ctrl + Shift + F
Jump to Crates	Shift + C	Shift + C
Jump to Playlist	Shift + P	Shift + P
Jump to Database	Shift + D	Shift + D
Add song to selected Playlist	Cmd + P	Ctrl + P
Add song to selected Crate	Cmd + C	Ctrl + P
Deletes items from Crate/Playlist/Database	Delete	Delete
Create new Playlist	Alt + P	Alt + P
Create new Crate or Sub-Crate	Alt + C	Alt + C
Rename selected Index item (Crate, Playlist, etc.)	Ctrl + R	Ctrl + R
Select all files in File List	Ctrl + A	Ctrl + A
Force analyze a song without loading to a deck	Shift + A	Shift + A

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Function	Mac Key	Windows Key
Toggle keyboard control from Browser Mode to Performance Mode	Ctrl + Enter	Ctrl + Enter
Toggle Browser and Snapshot view	Tab	Tab
Refresh Browser window	Shift + F5	
Maximize Browser view	Shift + F6	Shift + F6

Deck Commands

Deck Selection

The the table below lists key commands for assigning the Decks to either side of an M-Audio Xponent DJ Control surface. However it is also important to remember that commands also bring the decks into focus when using your mouse and keyboard to control Torq. If you are using qualified third-party hardware, refer to the its documentation.

⚠ *Mac users should go into the Keyboard Preferences in Mac OS X, and change the following options before using Torq key commands: On the Keyboard page, Enable "Use all F1, F2, etc. keys as standard function keys." On the Keyboard Shortcuts page under Dashboard & Dock, disable "Dashboard" (F12). Then disable "Exposé" under Exposé & Spaces.*

Deck Assignment/Selection	Mac Key	Windows Key
Left Xponent side controls Deck A	F5	F5
Left Xponent side controls Deck B	F6	F6
Left Xponent side controls Deck C	F7	F7
Left Xponent side controls Deck D	F8	F8
Right Xponent side controls Deck A	F9	F9
Right Xponent side controls Deck B	F10	F10
Right Xponent side controls Deck C	F11	F11
Right Xponent side controls Deck D	F12	F12

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⚠ *The corresponding Function keys listed above for selecting Decks B and C are the same in both Four Deck and Two Deck modes.*

Deck Functions

The following table list key commands for various deck related functions.

⚠ *All function keys in parentheses are the Deck assignment key commands listed in the found in the previous section. In the context of this section the parentheses mean that you should momentarily press or tap them instead of holding them down, and then follow up with the rest of the key stroke as usual. For example, (F5)+Shift+1 means you should tap the F5 to bring Deck A into focus on the left side of your hardware, then hold down Shift and press number 1 key above the letters on your keyboard.*

Deck A

⚠ *The Up, Down, Left, and Right Arrow Keys are listed as Up, Down, Left or Right.*

Function	Mac Key	Windows Key
Load selected song to Deck A	F1 or Cmd + Left	F1 or Ctrl + Left
Unload Track on Deck A	Shift + A	Shift + A
Set QuickCue 1 on Deck A	(F5)+Shift+1 or (F9)+Shift+6	(F5)+Shift+1 or (F9)+Shift+6
Set QuickCue 2 on Deck A	(F5)+Shift+2 or (F9)+Shift+7	(F5)+Shift+2 or (F9)+Shift+7
Set QuickCue 3 on Deck A	(F5)+Shift+3 or (F9)+Shift+8	(F5)+Shift+3 or (F9)+Shift+8
Set QuickCue 4 on Deck A	(F5)+Shift+4 or (F9)+Shift+9	(F5)+Shift+4 or (F9)+Shift+9
Set QuickCue 5 on Deck A	(F5)+Shift+5 or (F9)+Shift+0	(F5)+Shift+5 or (F9)+Shift+0
Select QuickCue 1 on Deck A	(F5)+1 or (F9)+6	(F5)+1 or (F9)+6
Select QuickCue 2 on Deck A	(F5)+2 or (F9)+7	(F5)+2 or (F9)+7
Select QuickCue 3 on Deck A	(F5)+3 or (F9)+8	(F5)+3 or (F9)+8
Select QuickCue 4 on Deck A	(F5)+4 or (F9)+9	(F5)+4 or (F9)+9
Select QuickCue 5 on Deck A	(F5)+5 or (F9)+0	(F5)+5 or (F9)+0

Deck B

⚠ *The Up, Down, Left, and Right Arrow Keys are listed as Up, Down, Left or Right.*

Function	Mac Key	Windows Key
Load selected song to Deck B	F2 or Cmd + Right	F2 or Ctrl + Right
Unload Track on Deck B	Shift + F2	Shift + F2
Set QuickCue 1 on Deck B	(F6)+Shift+1 or (F10)+Shift+6	(F6)+Shift+1 or (F10)+Shift+6

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Function	Mac Key	Windows Key
Set QuickCue 2 on Deck B	(F6)+Shift+2 or (F10)+Shift+7	(F6)+Shift+2 or (F10)+Shift+7
Set QuickCue 3 on Deck B	(F6)+Shift+3 or (F10)+Shift+8	(F6)+Shift+3 or (F10)+Shift+8
Set QuickCue 4 on Deck B	(F6)+Shift+4 or (F10)+Shift+9	(F6)+Shift+4 or (F10)+Shift+9
Set QuickCue 5 on Deck B	(F6)+Shift+5 or (F10)+Shift+0	(F6)+Shift+5 or (F10)+Shift+0
Select QuickCue 1 on Deck B	(F6)+1 or (F10)+6	(F6)+1 or (F10)+6
Select QuickCue 2 on Deck B	(F6)+2 or (F10)+7	(F6)+2 or (F10)+7
Select QuickCue 3 on Deck B	(F6)+3 or (F10)+8	(F6)+3 or (F10)+8
Select QuickCue 4 on Deck B	(F6)+4 or (F10)+9	(F6)+4 or (F10)+9
Select QuickCue 5 on Deck B	(F6)+5 or (F10)+0	(F6)+5 or (F10)+0

Deck C

⚠ *The Up, Down, Left, and Right Arrow Keys are listed as Up, Down, Left or Right.*

Function	Mac Key	Windows Key
Load selected song to Deck C	F3 or Cmd + Up	F3 or Ctrl + Up
Unload Track on Deck C	Shift + F3	Shift + F3
Set QuickCue 1 on Deck C	(F7)+Shift+1 or (F11)+Shift+6	(F7)+Shift+1 or (F11)+Shift+6
Set QuickCue 2 on Deck C	(F7)+Shift+2 or (F11)+Shift+7	(F7)+Shift+2 or (F11)+Shift+7
Set QuickCue 3 on Deck C	(F7)+Shift+3 or (F11)+Shift+8	(F7)+Shift+3 or (F11)+Shift+8
Set QuickCue 4 on Deck C	(F7)+Shift+4 or (F11)+Shift+9	(F7)+Shift+4 or (F11)+Shift+9
Set QuickCue 5 on Deck C	(F7)+Shift+5 or (F11)+Shift+0	(F7)+Shift+5 or (F11)+Shift+0
Select QuickCue 1 on Deck C	(F7)+1 or (F11)+6	(F7)+1 or (F11)+6
Select QuickCue 2 on Deck C	(F7)+2 or (F11)+7	(F7)+2 or (F11)+7
Select QuickCue 3 on Deck C	(F7)+3 or (F11)+8	(F7)+3 or (F11)+8
Select QuickCue 4 on Deck C	(F7)+4 or (F11)+9	(F7)+4 or (F11)+9
Select QuickCue 5 on Deck C	(F7)+5 or (F11)+0	(F7)+5 or (F11)+0

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Deck D

⚠ *The Up, Down, Left, and Right Arrow Keys are listed as Up, Down, Left or Right.*

Function	Mac Key	Windows Key
Load selected song to Deck D	F4 or Cmd + Down	F4 or Ctrl + Down
Unload Track on Deck D	Shift + F4	Shift + F4
Set QuickCue 1 on Deck D	(F8)+Shift+1 or (F12)+Shift+6	(F8)+Shift+1 or (F12)+Shift+6
Set QuickCue 2 on Deck D	(F8)+Shift+2 or (F12)+Shift+7	(F8)+Shift+2 or (F12)+Shift+7
Set QuickCue 3 on Deck D	(F8)+Shift+3 or (F12)+Shift+8	(F8)+Shift+3 or (F12)+Shift+8
Set QuickCue 4 on Deck D	(F8)+Shift+4 or (F12)+Shift+9	(F8)+Shift+4 or (F12)+Shift+9
Set QuickCue 5 on Deck D	(F8)+Shift+5 or (F12)+Shift+0	(F8)+Shift+5 or (F12)+Shift+0
Select QuickCue 1 on Deck D	(F8)+1 or (F12)+6	(F8)+1 or (F12)+6
Select QuickCue 2 on Deck D	(F8)+2 or (F12)+7	(F8)+2 or (F12)+7
Select QuickCue 3 on Deck D	(F8)+3 or (F12)+8	(F8)+3 or (F12)+8
Select QuickCue 4 on Deck D	(F8)+4 or (F12)+9	(F8)+4 or (F12)+9
Select QuickCue 5 on Deck D	(F8)+5 or (F12)+0	(F8)+5 or (F12)+0

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Appendix B: Warranty

Warranty Terms

M-Audio warrants products to be free from defects in materials and workmanship, under normal use and provided that the product is owned by the original, registered user. Visit www.m-audio.com/warranty for terms and limitations applying to your specific product.

Warranty Registration

Immediately registering your new M-Audio product entitles you to full warranty coverage and helps M-Audio develop and manufacture the finest quality products available. Register online at www.m-audio.com/register to receive FREE product updates and for the chance to win M-Audio giveaways.

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